43456

National Library of Canada | Bibliothèque nationale du Canada

CANADIAN THESES ON MICROFICHE

THÈSES CANADIENNES SUR MICROFICHE

NAME OF AUTHOR/*NOM DE L'AUTEUR* Leslie Kroening

TITLE OF THESIS/*TITRE DE LA THÈSE* Motivations of Wilderness Canoeists

UNIVERSITY/*UNIVERSITÉ* University of Alberta

DEGREE FOR WHICH THESIS WAS PRESENTED/ *GRADE POUR LEQUEL CETTE THÈSE FUT PRÉSENTÉE* MA

YEAR THIS DEGREE CONFERRED/*ANNÉE D'OBTENTION DE CE GRADE* 1979

NAME OF SUPERVISOR/*NOM DU DIRECTEUR DE THÈSE* Dr. Edgar L. Jackson

Permission is hereby granted to the NATIONAL LIBRARY OF CANADA to microfilm this thesis and to lend or sell copies of the film.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

L'autorisation est, par la présente, accordée à la BIBLIOTHÈQUE NATIONALE DU CANADA de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans l'autorisation écrite de l'auteur.

DATED/*DATÉ* June 20/79 SIGNED/*SIGNÉ* Leslie Kroening

PERMANENT ADDRESS/*RÉSIDENCE FIXÉ*
10813 - 74 Avenue
Edmonton, Alberta
T6E 1G8

NL-91 (3-74)

National Library of Canada

Cataloguing Branch
Canadian Theses Division

Ottawa, Canada
K1A 0N4

Bibliothèque nationale du Canada

Direction du catalogage
Division des thèses canadiennes

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us a poor photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30. Please read the authorization forms which accompany this thesis.

THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de mauvaise qualité.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30. Veuillez prendre connaissance des formules d'autorisation qui accompagnent cette thèse.

LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE

NL-339 (3/77)

THE UNIVERSITY OF ALBERTA

MOTIVATIONS OF WILDERNESS CANOEISTS

by

© Leslie Lenore Kroening

A THESIS

Submitted to

The Faculty of Graduate Studies and Research

In Partial Fulfillment of the Requirements for
the Degree of Master of Arts

Department of Geography

Edmonton, Alberta

Fall, 1979

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned have certified that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled MOTIVATIONS OF WILDERNESS CANOEISTS, submitted by Leslie Lenore Kroening in partial fulfillment of requirements for the degree of Master of Arts.

Edgar L. Jackson

Supervisor

N. C. Brown

Thomas L. Burton

DATED May 24, 1979

ABSTRACT

This study explored the motivations for taking long canoe trips in the "northern wilderness". It consisted of two complementary stages. The first stage was a series of in-depth guided interviews with fifteen canoe trippers, the transcripts of which were analyzed and interpreted by means of detailed content analyses and interpretive summaries. The findings from the interviews formed the basis for the second stage, which was a questionnaire mailed to 327 canoe trippers in Canada, the U.S.A., and Europe. The responses to the questionnaire were analyzed according to simple frequency distributions and crosstabulations of pairs of variables.

The findings provided information about the characteristics and outdoor experience of the people who take long wilderness canoe trips, about the features of wilderness canoeing which distinguish its appeal as a recreational activity, about what a long canoe trip is like, and about the nature of motivations for canoe tripping. The evidence revealed that the activity of taking long canoe trips in the wilderness has a very general appeal for this very specific group of recreationists.

The complementary use of guided interviews and a mail questionnaire was found to be useful for this exploratory research. The type of information obtained has potential value as background information for wilderness managers, and as a record of an extreme form of wilderness recreation which provides a basis for comparison with types of wilderness recreation which are subject to some degree of influence by professional recreation planners and managers.

ACKNOWLEDGMENTS

I was fortunate to have had some very special people working with me on this thesis. My supervisor, Ed Jackson, carefully read everything I gave him, responded with criticism I could work with, and - what's more - did these things fast! I am very grateful for his consistent interest and support, and for the way in which working with him was both pleasant and stimulating.

Charlie Brown and Tim Burton also followed my project with interest and offered much helpful advice. Charlie's contribution which was particularly memorable to me was the carrying of some food and treats into Rabbitkettle Lake, the half-way point of Paul's and my Nahanni River trip. Tim's was helping to make the oral examination a lively and enjoyable experience.

The canoeists who consented to be interviewed, the people who pretested the questionnaire, and the trippers who answered it offered their assistance enthusiastically, and provided me with many insights into the experiences of these vibrant and interesting people. I truly appreciate their contributions.

My mom, Lenore Kroening, typed my thesis. Although she likely thought I was overly wordy, she produced a beautiful original, which is an important contribution to those who will read the thesis. I am grateful for her precision and care, and for her considerable patience.

To my favourite canoeing partner, Paul, with whom I hope to spend many more years paddling magnificent Canadian rivers and lakes, I give my thanks for his unfailing encouragement and love.

TABLE OF CONTENTS

PAGE

Abstract iv

Acknowledgements v

List of Tables x

List of Figures xiii

Chapter

I WILDERNESS CANOE TRIPPING: AN EXAMPLE OF MOTIVATION IN RECREATION BEHAVIOUR 1

Introduction 1

A Behavioural Approach to Recreation Studies 2

The Northern Wilderness 3

The Role of Perception in Wilderness Recreation 6

The Canoe Tripper as Recreation Planner 8

Objectives of the Study and Outline of the Thesis 9

II REVIEW OF THE LITERATURE 10

Introduction 10

Wilderness Recreation Research 11

1. Research Findings 11

2. Research Problems 17

Research on Personality in Environment 20

Motivation Theory and Research 26

Motivations for Recreational Canoe Tripping: Statement of the Problem 35

PAGE

III THE INTERVIEWS 37
Introduction 37
The Interview Subjects 37
The Interview Format 40
Strengths and Weaknesses of the Guided Interview 43
Analysis of the Interviews 48
Findings of the Interviews 53
Limitations of the Interviews 58

IV THE QUESTIONNAIRE SURVEY 61
Introduction 61
Formulation of the Questionnaire 61
The Pre-Test 65
Typing, Printing, and Mailing the Questionnaire 66
The Survey Frame 70
1. Sources of the Survey Frame 70
2. Biases in the Survey Frame 73
Responses to the Questionnaire Survey 78
1. Response Rate 78
2. Non-Response 78
Strengths and Limitations of the Questionnaire 82

V DESCRIPTION OF THE RESPONSES TO THE QUESTIONNAIRE SURVEY 85
Introduction 85
Characteristics of the Respondents 86
Canoe Tripping Experience 93

PAGE

Some Features of the Recalled Trip 107

Planning the Trip 110

The Trip in Progress 118

Remembering the Trip 135

Motivations 140

VI ASSOCIATIONS OF RESPONDENTS' CHARACTERISTICS, MOTIVATIONS AND TRIP LOCATIONS WITH SELECTED VARIABLES 156

Introduction 156

Some Characteristics of Respondents Which Were Associated with Other Variables 157

Associations of Expressed Motivations with Other Variables 166

Associations Between Trip Locations and Other Variables . . . 174

Conclusion 177

VII REVIEW OF THE STUDY AND SUMMARY AND IMPLICATIONS OF ITS FINDINGS 179

Introduction 179

A Review of How the Study Was Conducted 180

Summary of the Findings 181

1. Characteristics of People Who Take Long Wilderness Canoe Trips 181
2. The Features of Wilderness Canoeing Which Distinguish Its Appeal as a Recreational Activity . . 183
3. Characteristics of a Long Canoe Trip 185
4. The Motivations for Canoe Tripping 187

What the Findings Mean: Consistency and Meaning in the Survey Results 190

Practical Implications of the Study 192

PAGE

Implications of the Study for Research 195

Bibliography 196

Appendices

1. FACILITIES FOR USE BY RECREATIONAL CANOEISTS TAKING TRIPS IN THE NORTHERN WILDERNESS 208

2. INTERVIEW SCHEDULE 210

3. EXAMPLES TAKEN FROM INTERVIEWS OF THE USE OF QUESTIONS DESIGNED TO STIMULATE CONVERSATION 213

4. RELEASE FORM 218

5. THE DETAILED CONTENT ANALYSIS FOR ONE INTERVIEWEE 219

6. AN INTERPRETIVE SUMMARY OF AN INTERVIEW 221

7. FINAL DRAFT OF THE COVERING LETTER AND THE QUESTIONNAIRE 225

8. PRODUCTION OF THE QUESTIONNAIRE BOOKLET 246

9. THE FOLLOW-UP LETTER 247

10. SCALE OF REMOTENESS FOR RIVERS AND LAKES 248

11. THE USE AND MEANING OF THE CHI-SQUARE STATISTIC 249

12. RECOMMENDED CHANGES FOR THE QUESTIONNAIRE 250

LIST OF TABLES

TABLE	TITLE	PAGE
3.1	Some Characteristics of Interview Subjects	39
4.1	Composition of the Questionnaire	64
4.2	Some Characteristics of Pre-Test Subjects	67
4.3	Sources of Names and Addresses for the Survey Frame . . .	72
4.4	Destinations of the Questionnaires	72
4.5	Proportion of Women Surveyed by Country	75
4.6	Rate of Response to Mail Survey by Country	79
5.1	Age of Respondents	87
5.2	Highest Level of Education Completed by Respondents . . .	88
5.3	Sex by Country of Origin	89
5.4	Occupation by Country of Origin	90
5.5	Parenthood by Country of Origin	91
5.6	Club Membership by Country of Origin	92
5.7	Number of Qualifying Trips Taken by Respondents	95
5.8	Duration of Longest Trip Taken by Respondents	96
5.9	Most Remote Trip Location Reported by Respondents	98
5.10	Relative Commitment of Respondents to Canoe Tripping . . .	99
5.11	Reasons for Taking the First Long Canoe Trip	101
5.12	Camping and Canoeing Experience of Respondents	103
5.13	How Canoe Skills Were Learned	105
5.14	Year of Recalled Trip	108
5.15	Recalled Location by Most Remote Location	109
5.16	Tripping with One's Spouse by Sex	110

TABLE TITLE PAGE

5.17 Attitudes Concerning the Role of Planning 111

5.18 Minimum Conditions Required for Trips 113

5.19 Reasons for the Preferred Size for a Canoe Party 115

5.19a Reasons for a Higher Number of Canoes in the Party 115

5.19b Reasons for a Lower Number of Canoes in the Party 115

5.20 Ranking the Roles of the Canoe 119

5.21 Attitudes Toward Potential Problems and Hardships 121

5.22 Perceived Seriousness of Potential Hazards 123

5.23 Precautions Taken to Minimize the Hazards 125

5.24 The Nature of a Canoe Trip Experience 132

5.25 Whether Other Activities Provide the Same Benefits with Similar Impact as Canoe Tripping 139

5.26 Most Important Reasons for Taking Long Wilderness Canoe Trips 146

5.27 Ranked Reasons for Taking Long Wilderness Canoe Trips . . 149

5.28 Appealing Features of a Long Wilderness Canoe Trip . . . 152

6.1 Summary of Significance Levels for Associations Between Club Membership and Selected Variables 158

6.2 Preference for the Pacing of a Canoe Trip by Club Membership 159

6.3 Preferred Size of Canoe Party by Club Membership 160

6.4 The Motivation, "to Experience the Out-of-Doors Intensely", by Club Membership and Function of Club . . . 161

6.5 The Motivation, "to Experience the Out-of-Doors Intensely", by Learning Canoeing with a Club 162

6.6 Simplicity or Complexity of Motivations by Club Membership 163

TABLE TITLE PAGE

6.7 Learning to Canoe on One's Own by Sex of Respondent . . . 164

6.8 Learning to Canoe with One's Family by Sex of Respondent 165

6.9 Independence of the Canoe Party as an Appealing Feature of Long Wilderness Canoe Trips by Sex of Respondent 165

6.10 Summary of Significance Levels for Associations Between the Motivation, "to Socialize with My Good Friends", and Selected Appealing Features of Long Wilderness Canoe Trips 168

6.11 Independence of the Canoe Party as an Appealing Feature of Long Wilderness Canoe Trips by the Motivation, "to Socialize with My Good Friends" 168

6.12 The Unlikelihood of Seeing Other People as an Appealing Feature of Canoe Trips by the Motivation, "to Socialize with My Good Friends" 170

6.13 The Lack of Accustomed Comforts as an Appealing Feature of Long Wilderness Canoe Trips by the Motivation, "to Meet the Challenge of Physical Endurance" 170

6.14 Attitudes Toward Potential Problems and Hardships by the Motivation, "to Meet the Challenge of Physical Endurance" 171

6.15 The Lack of Accustomed Comforts as an Appealing Feature of Long Wilderness Canoe Trips by the Motivation, "to Escape the Routines of Everyday Life" 173

6.16 The Simplicity of Life-Style as an Appealing Feature of Long Wilderness Canoe Trips by the Motivation, "to Escape the Routines of Everyday Life" 173

6.17 Most Remote Location by the Motivation, "to See Wildlife" 175

6.18 Location of the Recalled Trip by the Motivation, "For Love of Adventure" 176

LIST OF FIGURES

FIGURE TITLE PAGE

1.1 Approximate Extent of the "Northern Wilderness" for Canoe Tripping 4

5.1 Experience with Different Styles of Camping 104

5.2 Expressed Preferences for the Organization of Trips . . 127

5.2a Decision-Making 127

5.2b Organization of the Trip 127

5.2c Assignment of Responsibilities 128

5.2d Importance of Other Activities 128

5.2e Pacing the Trip 129

5.2f Living Arrangements 129

5.2g Daily Schedule 129

5.3 The Nature of Motivations 142

5.3a "In the past, I have thought about my motivations for canoe tripping ... " 142

5.3b "When I plan a trip, my motivations are ... " . . 142

5.3c "When I'm on a trip, my motivations are ... " . . 143

5.3d "My motivations seem to be ... " 143

5.3e "My motivations seem to be ... " 144

5.4 Number of Reasons for Wilderness Canoeing Checked by Respondents 145

CHAPTER ONE

WILDERNESS CANOE TRIPPING: AN EXAMPLE OF MOTIVATION IN RECREATION BEHAVIOUR

Introduction

The examination of recreation behaviour by social scientists is a phenomenon which has occurred largely since the second world war. During this short history of the study of recreation behaviour, the types of questions which have been asked have changed remarkably. In the early years, questions such as, "Who engages in what activities?", "How much of a person's time and income is spent on leisure?", and "How far do people travel to reach the recreation site?" claimed researchers' interest. The answers to these questions were usually measurable in standardized units such as hours, dollars, and miles; and quantifiable in characteristics such as age, sex, income, and occupation.

The types of questions concerning recreation behaviour which have been asked with increasing frequency by researchers in recent years usually cannot be answered in the same way. These questions ask, for example, how people come to choose particular types of recreation activities, what the nature of the recreation experience is, what satisfactions are gained from recreation experiences, and how recreation fits into people's life-styles. These questions are indicative of a different approach to the study of recreation which focuses on the meaning of the experience both for individuals and members of identifiable groups. This study takes that approach in examining the meaning of the recreational experience of canoe tripping in the wilderness for a group of modern recreational canoeists. The wilderness setting for this activity is viewed as a recreational environment which produces distinct satisfactions for canoeists. The meaning of the canoe tripping experience was assessed with two methodologies used in a complementary manner. The first methodology was the guided, in-depth interview, which was conducted with fifteen subjects; the second was a mail survey sent to 327 subjects.

A Behavioural Approach to Recreation Studies

Recreation is a phenomenon for which many definitions exist. While it has been viewed alternatively as a state of mind, a set of activities, a special use of time, or as the opposite of work, perhaps the most useful approach when trying to understand recreation behaviour is to view recreation as a special kind of experience. Driver and Tocher (1970) call this approach behavioural, and develop it by offering some postulates about recreation. The first postulate is a definition: recreation is an experience which results from recreational engagements. The remaining four postulates constitute minimum and necessary conditions of recreational engagements. Recreational engagements require a commitment from the recreationist; they are self-rewarding; they require personal and free choice by the participant; and they occur during non-obligated time.

The usefulness of this approach to studying recreation stems from the nature of human behaviour. Most of the things that people do - their behaviours - are directed toward satisfying needs. That is, most behaviour is motivated to achieve some sort of goal which satisfies physiological and psychological needs felt by the individual. It is quite possible that these needs, and consequently the corresponding motivations, can be identified. Further, it is evident that needs are both highly individualized and personal in the ways in which they are manifested, and also that they are fundamental enough in their basic characteristics to be generally applicable to larger groups in society. The study of motivations, therefore, offers promise to the researcher in recreation, as well as to those studying other aspects of human experience.

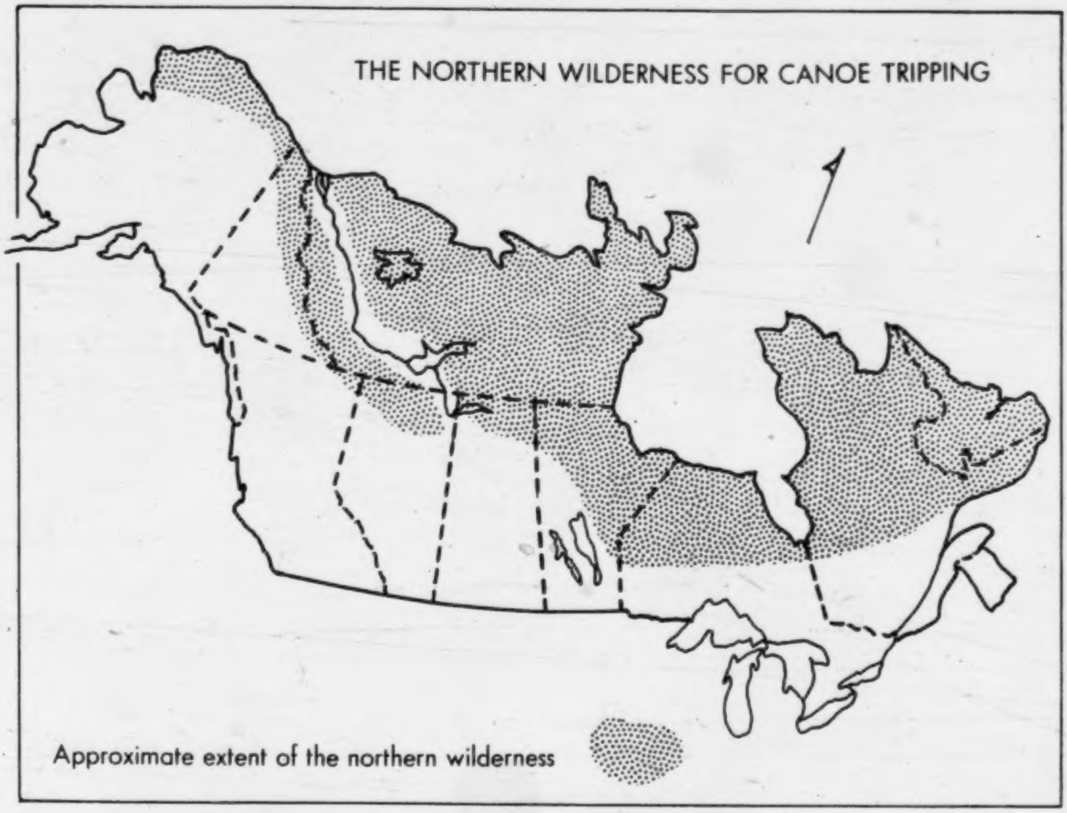
The Northern Wilderness

That portion of the whole geographical environment toward which behaviour is directed has been called the "behavioural environment" (Sonnenfeld, 1972). For the researcher concerned with the nature of the recreation experience, an important task is to learn what elements of the wider environment comprise the individual's behavioural environment; that is, to learn what elements are significant in eliciting a behavioural response from the recreationist. Behaviour includes overt as well as subjective responses such as expectations, perceptions, and motivations (Saarinen, 1976). There are two approaches to this task: one is to learn how particular individuals respond to a variety of environments; the other is to choose a particular environment and study how different individuals respond to it. The first approach is psychological; the second is geographical. This study takes a geographical point of view by selecting a specific type of environment - namely, wilderness - and examining the behaviour of people toward it.

The specific environment chosen is the northern wilderness of the North American mainland. Roughly speaking, this includes the Northwest Territories (except for the transportation and settlement corridor of the Mackenzie River), the eastern edge of the Yukon, the northern thirds of the prairie provinces, northern Alaska, unsettled areas of Ontario and Quebec, and Labrador (see Figure 1.1). At first glance, this "northern

Figure 1.1

Approximate Extent of the "Northern Wilderness" for Canoe Tripping


THE NORTHERN WILDERNESS FOR CANOE TRIPPING
Approximate extent of the northern wilderness

wilderness" appears to be far more general than specific. It encompasses a wide variety of physiographic, vegetative, and climatic regions, not to mention a multitude of varied, more localized environments. Rather than using concepts appropriate to the physical sciences, however, a description appropriate to the study of recreation behaviour is sought. On this basis, "northern wilderness" is quite specific, and can be described by a number of conditions which, for the recreationist, distinguish it from non-wilderness areas as well as from other wilderness areas. Those conditions which distinguish it from non-wilderness areas are:

1. Limited accessibility
    There are very few population centres throughout the northern wilderness. Those which exist may be separated from one another by hundreds of kilometers. Road systems are very poorly developed, if they exist at all. Most surface transportation is provided by natural waterways, some of which have boat and barge service of varying regularity and reliability during the ice-free season. Scheduled flights link many centres by air. Small, private planes are often used by business people and recreationists as well.

2. Sparse human habitation
    Settlements are relatively small with limited services, and are separated from each other by great distances. Some areas have dispersed populations of natives involved in trapping, hunting, and fishing. Mineral exploration camps exist in some areas, as well as commercial fishing lodges. Most historic sites feature activities associated with living off the land and with early geographic exploration.

3. Very long travel distances
    Although distance has been mentioned already, it must be emphasized. The northern wilderness is by far the most extensive on the North American continent.

Because of all these conditions, canoe tripping is a form of wilderness recreation well suited to the travel opportunities and limitations of the northern wilderness. The canoeist might identify the following attributes of the northern wilderness as features which distinguish it from more frequently visited wilderness areas to the south:

1. A short, uncertain ice-free season
    The season for canoeing in the central and eastern mainland Northwest Territories and Alaska is about six to eight weeks. In some years, very large lakes do not lose their ice completely. The time limit imposed by ice is significant when the travel distances of some trips are considered.

2. Difficult weather conditions
    During summer, much of the northern wilderness experiences great variability in temperature (from below freezing to +30°C), very strong winds (particularly in the Barrens), and precipitation which can include snow.

3. Lakes
    Many river systems include large lakes with maximum

exposure to wind. Delays in travel due to strong winds are common. A severe hazard when combined with windy conditions is the near-freezing water temperatures which, especially on the lakes, can quickly result in hypothermia and death for a swamped canoeist.

4. Black flies and mosquitoes
These insects exist in plague proportions throughout most of the northern wilderness during July.

The Role of Perception in Wilderness Recreation

Specifying the conditions which distinguish the northern wilderness is a relatively simple matter. Defining wilderness is much more difficult. In the past, wilderness has often been defined in an ecological way, according to the relative impact that people have had on the natural environment. For example, according to an ecological definition, "pure" wilderness would be a natural environment in which ecological relationships had not been disturbed in any way by the presence of people or the products of human civilization. A cultural definition, in which wilderness is viewed as a natural resource, is far more appropriate for several reasons.

The first reason is related to the way in which resources are defined. According to O'Riordan's (1971, p. 4) definition, a resource is

> ... an attribute of the environment appraised by man to be of value over time within constraints imposed by his social, political, economic, and institutional framework.

That is, society defines what constitutes a resource and assigns value to it. Society has assigned increasing value to the resource of wilderness concurrently with the advance of urbanization and the depletion of areas of land which could be called wilderness. Individuals also define and evaluate resources, within the larger societal context, according to their personal needs, wants, and capabilities for using and deriving benefits from those resources. This is what Stephen Spurr (1966, p. 8) meant when he said that wilderness is "what we as humans, both individually and collectively, imagine it to be". Every wilderness recreationist comes to the wilderness witn a different set of expectations for the experience and very individualized ways of perceiving what is found there. In other words, a cultural definition can tell us something about the people who use and value wilderness. At the same time, it must take into account the physical characteristics of wilderness which contribute to its ecological definition since these characteristics are related to the recreationists' perceptions.

The second reason is that there is no place left on earth today which has not in some way received human impact. If recreational use of wilderness is permitted, then change in the physical resource is inevitable, as is change in the perceptions which wilderness recreationists have of the physical resource.

Consequently, a cultural definition rationalizes the use of perception studies for learning about wilderness recreation. The perceptions of the individuals involved in recreation, rather than artificial or natural objects present in the wilderness environment, constitute the recreational experience. Since individuals are members of a larger society, patterns of perception should be identifiable. Further, because things that people do very often are directed toward satisfying needs, what they perceive throughout their recreational experiences will be closely related to their motivations for taking part in those experiences. Motivation and perception are two of the interrelated aspects of recreation behaviour most critical to an understanding of why people do what they do.

The Canoe Tripper as Recreation Planner

While all of the features of the northern wilderness listed above certainly have limited its use as a recreation resource, a number of canoeists (and other recreationists) have been strongly attracted to that environment. Little is known about them, due partly to extreme variability of access and to the independent character of canoe trips. In addition, their impacts - economic, social, and ecological - are not likely to be significant because the canoeists are relatively small in number and they spend little time in settlements.* However, they have high potential as subjects for the study of motivation in recreation. This is because they must expend considerable effort to reach the recreation site and to prepare for their trips. Therefore, conscious selection of this specific and uniquely demanding environment must take place. The site must be perceived to have the potential for satisfying specific needs.

Furthermore, planning for the northern canoe trip must be done entirely by the canoe party itself. Only two formalized facilities exist at the present time solely for the convenience of the northern recreational canoeist. They are the canoe travel information services (as operated, for example, by TravelArctic of the Northwest Territorial Government) and the Hudson's Bay Company's U-Paddle Canoe Rental Service. These facilities are described in Appendix 1. Apart from these sources of assistance, members of a canoe party are totally responsible for the planning and execution of their trip. This includes conceiving the idea for it, being responsible for every aspect of organization, researching the nature of the physical environment to be encountered, being prepared to be totally self-sufficient for the duration of the trip (commonly three to four weeks), and conducting the trip completely independently. The canoe tripper is, in a very full sense, a recreation planner as well as a recreationist.

---

* Some economic impact is felt in the small community of Fort Simpson where airline companies are often chartered during July and August to take canoe parties into the very popular South Nahanni River. There are few other such exceptional examples of impact from canoeists, although canoeists contribute somewhat to the revenues of air charter companies in some other centres.

Objectives of the Study and Outline of the Thesis

The major objective of the present study is to determine what motivates people to take long canoe trips in the northern wilderness. This task requires that the elements of that wilderness which are attractive to trippers be specified precisely and related to their motivations (that is, to their activated desires to satisfy certain needs), and to their perceptions of the tripping experience in that environment. In a general sense, the purpose of this study is to learn what constitutes the appeal of a relatively "pure" wilderness to a group of modern recreationists.

The second chapter of this thesis reviews relevant academic literature on the subjects of wilderness recreation, perception, and motivation. Chapter Three explains in detail how the first stage of the study, involving in-depth interviews, was conducted and analyzed. Chapter Four describes the construction of the questionnaire and how the mail survey was carried out. The fifth chapter presents a descriptive analysis of the information collected by the questionnaire, while an explanatory analysis is given in Chapter Six. In the final chapter, the findings are summarized and related to recommendations for recreation planners and managers, as well as those involved in recreation research.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

The search for academic literature concerning outdoor recreation* cannot be confined to one discipline. In a paper entitled "Methodological Perspectives for the Study of Outdoor Recreation", Burdge and Field (1972, p. 64) recognized that because

> ... outdoor recreation is a practical category, not a theoretical concept ..., its explanation demands not only a variety of disciplines, but a variety of perspectives from within each discipline.

They also pointed out that there is a core of theory in every social science which has general applicability no matter what the behaviour or its setting. Brown et al. (1973) concurred with Burdge and Field that much recreation research has suffered from a fragmented, uni-disciplinary point of view.

Although a geographical approach to understanding wilderness recreation behaviour is taken in this study, as explained in Chapter One, concepts and theories from other disciplines are highly pertinent, and indeed, essential to a full understanding of that very complex behaviour. The present chapter reviews relevant literature from the disciplines of geography, forestry, psychology, sociology, and physical education under the headings of "Wilderness Recreation Research", "Research on Personality in Environment", and "Motivation Theory and Research". The first section describes approaches which have been taken in the past by researchers specifically interested in wilderness recreation. The remaining two sections discuss approaches to studying personality and its interaction with environment. These latter approaches are not specific to wilderness recreation; rather, they are fundamental to the study of human experience, of which recreation is one part.

---

* Recreation in undeveloped wilderness appears to be a North American phenomenon, perhaps due to the effects of different cultures, but also due to the relative abundance of extensive wilderness in North America. Consequently, academic interest in wilderness recreation behaviour has been confined mainly to Canada and the U.S.A.

Wilderness Recreation Research

1. Research Findings

The rapid increase in the use of North American wilderness for recreation since World War II, at a rate exceeding population growth, has been documented by many writers, including Stankey (1972), Lucas (1974), and Merriam and Knopp (1976). Because of this trend, much wilderness recreation research has reflected an immediate need for policy which could be applied to managing existing wilderness areas so that they could continue to provide experiences of high quality for the wilderness enthusiasts using them, and to providing guidelines for the creation of new wilderness areas. Such research has focussed on impacts made by the recreationists both upon the resource base and upon other recreationists attempting to partake in a wilderness experience. The Forest Service of the United States Department of Agriculture, which set up a research program in 1967 to deal specifically with wilderness management, has been responsible for the bulk of this research. Consequently, most of the research results apply to the managed American wilderness. Although the number of recreationists is smaller and the pressure on resources not as great, Canadian wilderness recreation is very similar to that in the United States; therefore, the results presented below can be applied broadly to the Canadian situation.

Before discussing research results, it is important to examine the concept of impact in wilderness recreation. Recreation researchers have applied the bioscientific concept of "carrying capacity" directly to recreational impact. Carrying capacity is "an optimal level of use ... above which quantity leads to an undesirable quality" (Brotherton, 1973, p. 6). In recreation, the term was translated to mean that the more an area was used by people, the less natural it became, and the lower quality it possessed. The manager's concern was that use be kept below the level at which unacceptable change occurred in the resource base. However, perception studies done in the 1960's discovered that "user definitions of wilderness quality do not subscribe to any simple linear relationship between use and satisfaction" (Stankey, 1973, p. 2). It was not only the level of use sustained by a particular resource which was associated with user satisfaction, but also the type of use and how the resource was perceived to be used. In other words, "quality" was recognized to be a subjective concept, dependent upon perception (Barkham, 1973). This aspect of carrying capacity is unique to human use of the environment, and has been called "perceptual capacity". Perceptual capacity refers to the effect of perceived crowding and other evidence of human use on the visitor's enjoyment and appreciation of a recreation site.

Consequently, the concept of perceptual capacity is multidimensional and dynamic. It takes ecological and perceptual aspects into account, and accepts some degree of change resulting from use of the natural environment. The degree of change to be permitted (which includes the extent and type of planned development) depends upon what kind of resource-based experience is to be provided according to the objectives for the particular area, and upon the perceptions of the resource and the experience by its users. The wilderness recreation research reported below has identified certain consistencies in perceptions, attitudes, and preferences of wilderness users which permit their consideration in wilderness management decisions.

A baseline, exploratory study was conducted from 1960-62 for the U.S. Outdoor Recreation Resources Review Commission (ORRRC) (Wildland Research Center, 1963). This study found that wilderness users were of higher socioeconomic status than the average American, and tended to have more education. Most were males, and most were married. Their friends and families tended to enjoy camping. They were more likely to be committed to wilderness recreation if they had been introduced to camping in their early youth, if this interest was reinforced by friends and family, and if they grew up in urban environments. The researchers cautioned that, despite these general tendencies, there was much variation among recreationists at any one area, and also among those visiting different areas.

Various motives for visiting wilderness were assessed. Two groups of motives were determined to be the most significant: "aesthetic-religious" and "exit-civilization". Aesthetic-religious motives arose from the perceived ability of the natural, unspoiled resource to inspire and renew the individual (p. 146). Exit-civilization motives referred to "a general desire to escape from crowded cities and crowded resort areas" (p. 145). These motives were expressed consistently throughout the study areas. Although motives were consistent, attitudes about development of the wilderness resource were not. People who were less experienced with, less interested in, or less knowledgeable about wilderness were more likely to approve development measures than those who were more committed to wilderness.

The inconsistency presented by some wilderness recreationists favouring limited development was noted in an earlier study by Bultena and Taves (1961). Hendee et al. in 1968 tried to handle the inconsistency problem by creating a wilderness purism scoring technique which involved the scaling of orientations toward wilderness. They defined wilderness purists as those whose attitudes coincided most closely with the definition of wilderness specified in the U.S. Wilderness Act of 1964. Testing of a shortened scale confirmed the ORRRC finding that the most important class of variables for identifying wilderness purists was a high affinity for the natural environment little influenced by humans. More specifically, Heberlein (1973) used Hendee's data to show that 77 per cent of the variance in wilderness orientation could be accounted for by attitudes toward artifactual elements of wilderness. That is, wilderness purists tended to feel less favourably than non-purists about campsite construction, trail improvements, and so on.

The Wilderness Act was used to define wilderness purism because it was the legislative framework within which managers could make decisions. Because it had been shown that it was possible to distinguish wilderness purists from other people on a variety of factors, it was assumed by the researchers that the former were the more sensitive to wilderness values. Consequently, when their preferences for certain management policies and rejections of others were shown to differ significantly from those expressed by others, it was suggested that their opinions (which were minority opinions) were proportionately more significant.

Another study (Stankey, 1973) used a similar scoring technique to identify wilderness purists. Attitudes and preferences regarding aspects of use were assessed. Purists were the most sensitive of all recreationists to crowding. However, crowding was not seen simply as a function of numbers: how other recreationists behaved was even more important to some purists than how many others there were. Purists preferred to meet up to ten smaller parties rather than to meet one large one. They preferred to see other recreationists near the periphery of the wilderness area or on the trail than to see them at their campsites. However, two thirds of all respondents preferred seeing too many people to seeing litter. Overused campsites, indicators of intensive use, were very unsatisfactory.

Purists, more than any of the other respondents, favoured controls on use, including restricting the number of people entering the wilderness, and limiting the size of parties. Physical modification of the resource in order to implement control measures was unacceptable.

Strong purists tended to prefer primitive means of travel, and were more sensitive to types of use they considered to be in conflict with their ideals. For example, canoeists were intolerant of power boaters in wilderness, and hikers objected to meeting horseback riders. Sensitivity to conflicting uses tended to be lower in areas where those uses had existed historically, suggesting that recreationists likely selected areas suitable for meeting their needs.

Three studies have indicated that wilderness managers perceived incorrectly how recreationists felt about aspects of use and managerial policies. Lucas (1965) described how managers of Forest Service wildernesses delimited the areas under their jurisdiction by their mapped boundaries, while recreationists perceived the wilderness as extending beyond the official boundary. These differing perceptions contributed to differing attitudes about whether development of facilities was appropriate in areas adjacent to the official wilderness. Hendee and Harris (1970) reported that managers believed, incorrectly, that wilderness users were resistant to behaviour control measures, uninterested in good campsite maintenance, and favourably disposed toward development. Peterson (1974) found that managers would permit in the wilderness some activities (such as beaver trapping) which recreationists found to be inappropriate; but they rejected facilities (for example, boat landings) of which canoeists approved. While canoeists were more demanding concerning wilderness purity, they were less able in practice to discern departures from the ideal (for example, logged areas). Peterson (p. 205) suggested that "canoeists are 'pulled' more strongly than managers by certain positive attributes of the area and 'pushed' more strongly by negative aspects of their daily life".

In summary, wilderness recreation research from about 1960 to 1975 found that wilderness users exist whose feelings about wilderness closely correspond with its legislative definition. They consistently express the desire for an experience which is the opposite of the urban experience of crowding, civilized amenities, and so on; and seek out places which they believe will fulfill that desire. There also exist people whose feelings about wilderness are less "pure": they prefer to enjoy simple developed facilities in a relatively natural environment. Perception research was recognized to be capable of providing potentially useful information for wilderness management decisions, since managers do not ascertain accurately the feelings of their recreational clientele by intuition alone.

2. Research Problems

Two kinds of problems have emerged with the type of research reported above. The first has to do with finding and selecting respondents; while the second, more fundamental, problem has to do with some underlying assumptions of such studies.

These studies have employed either the interview, a self-administered on-site questionnaire, a mail questionnaire, or a combination of these. Interest by respondents typically has been high. Response rates to mail questionnaires often have been higher than 70 per cent, although at least one large study reported a rate of only 54 per cent (Hendee, 1967, p. 65). However, sampling has been a consistent problem. In on-site studies of areas with low use, interviewers' judgment was relied upon to randomize the sample. In some studies, self-registrants were sampled by mail survey, thereby omitting from the survey recreationists who did not register. Often, leaders of the wilderness party were the only registrants in the party. A study of the differences between party leaders and members indicated that leaders were likely to be representative of attitudes of other party members, but not of their socio-economic characteristics (Jubenville, 1971). In summary,

> ... the nonregistration bias, the group leader bias, and nonresponse all seem to favor the more interested, committed wilderness visitor at the expense of the less involved visitor (Lucas and Oltman, 1971).

Consequently, the potential cumulative error has been quite high.

Furthermore, comparative studies of different areas have indicated that particular conclusions may be area-specific because perceptual capacity tends to be self-regulating (for example, see Merriam and Ammons, 1968). That is, people select areas they believe will provide them with satisfactory experiences. It is possible that these sampling problems can be overcome in future studies.

The second kind of problem calls for a change in the purpose and method of research rather than an improvement in current practice. A fundamental assumption of this type of research has been that attitudes expressed by recreationists have direct relevance for predicting their behaviour, and therefore are useful for making management decisions. This assumption has been called into question by writers in many behavioural sciences, including Deutscher (1966), Keisler _et al_. (1969), and O'Riordan (1973). Deutscher (p. 247) concluded that "... one has no reason to expect to find congruence between attitudes and actions and every reason to expect to find discrepancies between them". The reason he cited for expecting to find such discrepancies is that behaviour toward words (that is, responses to questions) is not the same as behaviour toward the objects that the words represent. Keisler _et al_. (p. 35) echoed Deutscher's expectation of finding discrepancies between attitudes and behaviour, adding that, in many cases, questions used to test attitudes require broad and philosophical thought, whereas in a behavioural situation, attitudes are specific and immediately personal. O'Riordan (p. 20) recommended that, because of this discrepancy, there was a need to refocus scientific inquiry and

> ... investigate behaviour, rather than attitudes, by isolating those people who have overtly acted in a particular way from those who have not done so .... By treating behaviour as the dependent variable it may be possible to identify the various influences which led to the specific act in question.

He went on to suggest techniques for identifying factors which either promote or inhibit action (one of which is the in-depth interview).

Following are two illustrations of the unreliability of attitude surveys in wilderness research. Heberlein (1973), using Hendee's 1968 survey results, showed that recreationists' approval of developments such as campsites and public toilets in wilderness was positively associated with the number of visits they made to wilderness. This correlation is the opposite of what would be expected. One would expect that more wilderness visits would be made by those more committed to purist ideals.

The second illustration is provided by two of the comparative studies of managers and visitors. Peterson's (1974, p. 204) comparison of perceptions of managers and visitors in the Boundary Waters Canoe Area found that "canoeists are using considerably more demanding criteria [than managers] for evaluating the area, but are somewhat less able to perceive imperfections ...." Hendee and Harris (1970) reported that managers felt that recreationists were less purist in orientation than recreationists thought they were. The researchers did not appear to consider that the reason for the difference in perceptions might have been that managers' perceptions are based on what visitors actually do in a wilderness, rather than on what they say their attitudes are. In an early study by Bultena and Taves in 1956 (published in 1961), it was evident that managers of the Quetico-Superior area would be faced with canoeists espousing wilderness ideals on the one hand, but desiring the development of numerous facilities on the other.

In summary, the type of research described in this section has a place within the realm of management decision-making for specific areas, where improved sampling procedures and more clearly stated assumptions may increase its usefulness. Its major contributions to recreation research in general have been the findings that wilderness recreationists have a wide range of expectations regarding the nature of the wilderness experience, and that it is not correct to assume that we know what those expectations are without studying them directly. However, understanding those expectations and why certain experiences are sought requires the study of motivations and of the relationship of personality to the environment. Attitudes do not explain behaviour. Behaviour itself can give us clues to its motivating influences.

Research on Personality in Environment

In 1923, Harlan Barrows defined geography as human ecology and identified its scope as the examination of human responses to the environment. A field of inquiry which developed from Barrows's orientation, and which has established a tradition in geography for the study of interactions between people and the environment, is natural hazard research. The object of inquiry in hazard research is not the natural event itself, but the hazard, which is:

> ... a threatening state to man compounded of an expectation of the future occurrence of natural events which impinge on a human use system that is provided, through adjustments, with a certain capacity to absorb these events (Kates, 1970, p. 15).

Hazard researchers have claimed that the study of human reactions to extreme geophysical events such as earthquakes and floods has much potential for helping us to understand the role of risk and uncertainty in human affairs in general (for example, see Burton et al., 1968).

Because hazard research recognizes the interaction of personality with environment, and because its scope of inquiry is viewed within the larger context of human experience, it can provide a model for outdoor recreation research.

The first hazard study, entitled Human Adjustment to Floods (White, 1945), was initiated by the realization that the traditional approach to flood management was inadequate. This approach included building structures to protect selected places; forecasting hazardous events; providing relief; and other, unsystematic private measures. Ironically, while public expenditures for flood control measures were constantly increasing, so were expenditures for public relief for flood victims, because people felt more secure about inhabiting flood hazard zones that were "protected" by physical structures and financial assistance from government. White suggested that the traditional approach was failing because it neglected a major factor affecting adjustment to floods, which was the discrepancy between the actual flood hazard and what flood zone occupants perceived the hazard to be. That is, people tended to minimize the hazard and forget the problems that the last flood had created. Furthermore, the impact of a flood was difficult to assess fully because intangible losses were unmeasurable, as were the advantages of living in the hazard zone. It was recognized that people are influenced to make environmental decisions by a multitude of factors that are interrelated in complex ways. Thus, this study established that perception plays an important role in human/environment interrelations. It also stimulated an interest in the variety of factors, including personality factors influencing perception, which affect how people make environmental decisions and take action on those decisions.

The growing interest in the role of perception and personality in environmental decision-making was reflected by the use of some traditionally psychological techniques in hazard research. One study (Saarinen, 1966) employed the Thematic Apperception Test to assess how Great Plains farmers perceived the drought hazard in their area, in order to relate their perceptions to adjustments that they made to drought. Barker and Burton (1969) modified the Rosenzweig Picture - Frustration Test for use in their assessment of response to stress in natural and social environments. Sims and Baumann (1974) applied a sentence completion technique to the problem of examining how people in Alabama and Illinois coped with tornado threat. These researchers (1976) also explored the role taken by consulting engineers and public health officials in the adoption of recycling waste water with the use of a projective technique which asked subjects to tell a story about a picture of a meeting in the mayor's office. In studies like these, in-depth interview assessment of individuals began to take its place in geographic research.

Interest in personality in environment expanded from the examination of situations created by extreme geophysical events to a more general consideration of the environmental personality. Sonnenfeld (1969, p. 137) argued that an individual's psychological environment is made up of knowledge, plus

> ... a set of attitudes and expectations and predispositions to behaviour which are a function of the individual's personality, a personality that predicts for environmental behaviour within the context of the geographical environment as much as social personality predicts for social behaviour within the context of the social environment.

Sonnenfeld (1970) developed a model of environmental personality and behaviour. Important aspects of an individual's environmental personality were awareness, operational style, style of action/reaction, and motivation. Behaviour was said to result from the operation of the personality within the "stimulus field" which included the informational, social, and physical environments. More recent work by Sonnenfeld (1971) recognized that characteristics of the physical environment influence an individual's behaviour toward it, and that changes which occur in the physical environment because of human actions provide feedback which stimulates further behaviour from the individual. He wrote that understanding this role of environment in response to environmental behaviour (and therefore, personality) was "critical in accounting for the landscapes and environmental alterations, controls, and other manipulations which are the concern of geography" (Sonnenfeld, 1971, p. 166).

McKechnie (1970) has attempted to measure "environmental dispositions" with an "Environmental Response Inventory" (ERI). An environmental disposition is the configuration of attitudes, beliefs, values, and sentiments about environment held by an individual which would be likely to influence environmental behaviour. McKechnie wrote items for the inventory to tap themes (such as pastoralism, urban life, leisure activities, architectural preferences, and so on) which had emerged from a review of environmental theory. Responses of 800 people to these items were factor analyzed to produce five male and six female factors. A biographical questionnaire and personality inventories were then administered to the ERI subjects and correlated with their ERI scales, enabling the researchers to write personality sketches of the subjects. McKechnie suggested that this technique could be developed further to predict preferences and behaviour in order to provide recreation specialists and other planners with useful information for policy and planning decisions.

Some of the research on personality in environment in the recreation field has examined the role of recreation in the psychological and social growth of the individual. Driver and Tocher (1970, p. 27) predicted that the behavioural approach to recreation would result in the provision of recreation services being viewed as a social service sub-system because recreation can help "promote the growth and development of individual members of society". More specifically, these psychological and social benefits have been claimed for wilderness recreation by many romantic writers such as Thoreau and Muir, as well as those with academic interests (for example, see Scott, 1974).

In addition, there has been considerable interest shown by psychologists in the use of the wilderness environment as a behaviour setting for the treatment of the mentally ill and for social deviants. In a review of research of this type, Smith (1976) reported that most researchers have failed to establish that elements of the wilderness environment, as opposed to elements of the social environment which characterize the wilderness therapy situation, are in fact the independent variables effecting behavioural changes in the individuals being treated. She likened the results of wilderness therapy to the results of encounter group therapy and questioned the real significance of the wilderness setting.

However, she reported that Bernstein (1972) has suggested that wilderness environments have unique characteristics which have therapeutic value: namely, a high degree of predictability and little ambiguity, due to a slow rate of change and low levels of population, noise, and movement. The source of any threat to the individual is easily identifiable, whereas threats arising from a social environment are often difficult to recognize and identify. Consequently, defensive behaviour is required in settings where the social environment dominates, while coping behaviour is more appropriate in the wilderness setting. Bernstein's suggestions are somewhat supported in a study by Thorstenson _et al_. (1975) which reported a decrease in anxiety level and an increase in hearing sensitivity in subjects who had just completed a twenty-nine day wilderness survival training experience. Bernstein suggested that wilderness therapy would be particularly potent for schizophrenics, who are excessively defensive. It may be that elements of the environment which promote health in the mentally ill are also of value to the mentally healthy. That is, the predictability and non-ambiguity which are characteristic of wilderness, as well as the type of behaviour demanded by that environment, may attract the sane person.

In summary, researchers from a variety of disciplines have examined the ways in which behaviour in environment results from the interaction of the human personality and the physical environment. While natural hazard research has convincingly demonstrated the importance of the personality variable in environmental behaviour, other lines of research continue at an exploratory stage and specific results are tentative. Whether focussing on the general environmental personality or on the more specific effects of personality on recreation behaviour, this research has placed environmental behaviour in the wider perspective of life-style, and thus has made an important methodological contribution to recreation research.

Motivation Theory and Research

In discussing approaches to the study of individual decision-making in behaviour choice situations, Burdge and Field (1972, p. 67) reminded the reader that recreation behaviour likely is motivated by the same motivations that operate in everyday life. Therefore, it is useful for recreation researchers to draw upon existing motivation theory instead of inventing "exotic motivations or drives" to explain recreation participation. Motivation theory is well developed in the psychological literature. Abraham Maslow's theory of motivation is perhaps the most comprehensive, yet simple, development, and has the advantage that many of the outdoor recreation studies which have looked at motivation can fit well into this theoretical system, even if they have not been based on it directly. Consequently, this system is discussed below, the main part of the discussion coming from Maslow's work, *Motivation and Personality* (1970).

Maslow classified human motivational life according to the basic and fundamental goals or needs, rather than according to motivated behaviour or goal objects of behaviour, both of which are too varied and many to be useful for classification. The fundamental needs are organized into a hierarchy of relative prepotency. When a lower level of needs in the hierarchy is mainly satisfied, then other and higher needs emerge to dominate the motivational life of the individual. Consequently, needs at the lowest level are considered to be the most potent, and the needs at the highest level, the least potent. The needs levels, starting with the lowest, are briefly described below:

Physiological Needs
These are needs for food, water, activity, rest, bodily integrity, homeostasis, and so on.

Safety Needs
These needs emerge when the physiological needs are relatively well satisfied. They are needs for security; stability; dependency; protection; freedom from fear, anxiety, and chaos; need for structure, order, law, limits, strength in the protector, and so on.

Belongingness and Love Needs
The person who is satisfied at the previous levels of need now feels the needs to love and be loved, to belong to the family or a group, and to develop friendships.

Esteem Needs
Self-esteem includes the need for strength, achievement, adequacy, mastery, competence, independence, and freedom. Aspects of needing the esteem of others are the desire for reputation and prestige, status, fame, dominance, recognition, attention, importance, dignity, and appreciation.

Self-Actualization Needs
Motivation of the individual at this very high need level requires that all lower levels of needs be relatively well satisfied. Then the individual can strive to become self-fulfilled. Maslow (p. 46) describes this need as the desire "to become everything that one is capable of becoming".

Interrelated with this hierarchy of basic needs are Cognitive Needs, or the needs to know and understand, and Aesthetic Needs. Maslow was unsure about how to integrate these two types of needs into the basic need hierarchy.

A motivational state is produced when an individual lacks or needs something, and so is motivated to seek that something. Because new and higher needs emerge when lower level needs are satisfied, the individual is almost constantly in a motivated state. That is, people are never totally satisfied, but feel the pressure of new needs which then dominate and organize their behaviour.

Farina (1974, p. 153) defined leisure in terms of prepotent needs: "Leisure is the state or condition of being free from the urgent demands of lower level needs, which include the first four levels". He then suggested that if a person is dominated by self-actualization needs, the lower level needs may become play-objects. One can challenge needs which are already satisfied. For example, he said that safety needs are challenged by such activities as gambling, mountain climbing, parachuting, and white collar crime. Maslow himself (p. 72) recognized that the value of some pleasures may be taken for granted (which may be a form of pathology) unless their deprivation is experienced anew, perhaps by choice. Those people who are best equipped to cope with deprivation are people who have been well satisfied. Driver and Tocher (1970, p. 14) added weight to this argument with their statement that,

> Maslow's conceptualization helps explain increasing demands for luxury items and recreational experiences in an economy that is quite rapidly removing constraints on gratification of lower level needs.

Farina's idea of playful challenging of satisfied basic needs may explain some types of leisure activity in our society.

The hierarchy of prepotency is not necessarily rigidly fixed, although it is a useful general description. For example, some people may value esteem needs above the need for love, or may become loved after having achieved recognition. Furthermore, some degree of need may exist at all levels simultaneously, since partial satisfaction at any level of need is more realistic than complete satisfaction at any level. In addition, real world behaviour is usually motivated by a variety of needs, and may not give a clear indication of what underlying needs are the motivators. Specifically in the recreation field, Driver and Tocher (1970, pp. 13-14), Harris (1973, p. 32) and Alderman (1974, Chapter 8) made it clear that motivation in recreation and sport is multidimensional. The multidimensionality of motivation makes it difficult to study. This difficulty is compounded because needs in any particular situation are more likely to be unconscious than conscious.

In recent years, there have been studies done of leisure behaviour which have taken either a general perspective on leisure motivation, or which have been concerned with examining one or a few specific needs. Much work has been done by physical educators on examining specific motivations in sport. In his Psychological Behavior in Sport, Alderman (1974) devoted a chapter each to reviewing achievement, aggression, and affiliation as motives in sport. Harris (1973) included chapters on the achievement motive, aggression, and stress seeking through sport in her book, Involvement in Sport: A Somatopsychic Rationale for Physical Activity. A sociological study by Emerson (1968) looked at motivational aspects of mountain climbing. Emerson concentrated on how the level of motivation during an actual ascent of Mount Everest was related to uncertainty of outcome. Social relationships among the climbers created and maintained the motivational climate. He recommended that future inquiry into motivational aspects of play should focus on the concepts of competence and self-testing. Klausner (1967), in a psychological study, examined the excitement of parachuting as constituted by a tension between fear and enthusiasm, and the transformation of the former into the latter. The emphases of these two studies and of those on stress seeking reported by Harris provide some support for Farina's concept, mentioned earlier, of challenging lower level needs.

A number of studies concerned with the general meaning and value of leisure have been conducted at the University of Montreal. These studies developed and applied a "Leisure Values Questionnaire" (LVQ), the purpose of which was to assess personal meanings attached to leisure behaviour (Ouellet and Perron, 1978). The LVQ is comprised of five scales, whose dimensions are described below:

> Status
> Includes status, power, influence, prestige, social recognition, achievement, professional upgrading, privileges, and rewards attached to activity
>
> Self-Realization
> Deals with self-development and enhancement, acquisition and utilization of knowledge, development of potentialities, awareness and self-management
>
> Climate
> Pertains to interpersonal relationships in leisure: well organized and clearly defined activities, pleasant social atmosphere, interpersonal support, understanding and competent leaders
>
> Risk
> Comprises items related to risk; challenge; competition; mastery of unknown; dangerous, risky or violent situations and tasks
>
> Freedom
> Deals with freedom in the choice of courses of action, independence and autonomy, free choice of leisure style

Ouellet and Perron reported on several studies which have applied the LVQ and given support to its validity. For example, in one study of 637 students it was found that for all subgroups of subjects, occupational choices and work values were significantly related to leisure values (Ouellet, 1973). Another set of studies of 2492 students supported the intuitive notion that high school students valued Status, Climate, and Risk more than college students; while the latter group attached greater importance than the former to Self-Realization and Freedom (Cuerrier, 1977; Lachapelle-Lemay, 1978; Trahan, 1977). The same authors, surveying a group of 2648 students, found that leisure values were strongly related to leisure preferences. That is, Freedom, was found to be important for students preferring outdoor and sociocultural activities while those preferring sports (particularly team sports) valued Status, Risk, and Climate more highly. Ouellet and Perron concluded in their review that the concept of values is useful for explaining individual and group behaviour; and that it enables us to view leisure as part of a general system termed "life-style", because values serve as standards for organizing leisure and non-leisure behaviour alike.

An ongoing study to develop a multidimensional conceptual model for characterizing physical activity is being directed by G.S. Kenyon of the University of Waterloo. The model conceptualizes physical activity as a sociopsychological phenomenon which can be reduced to a number of motivational dimensions. The basis for these dimensions is the perceived need-satisfying value of physical activity for the individual, called "instrumental value". Kenyon (1968) identified six "subdomains" (or motivational dimensions) although he suggested that more may be discernible eventually. These subdomains are briefly described as follows:

> Physical Activity as a Social Experience
> The primary purpose of activity is to provide a medium for social intercourse.

> Physical Activity for Health and Fitness
> Activity is considered to improve one's health and fitness.
>
> Physical Activity as the Pursuit of Vertigo
> Experiences provide, at some risk to the participant, an element of thrill through the media of speed, acceleration, sudden change of direction, or exposure to dangerous situations, with the participant usually remaining in control.
>
> Physical Activity as an Aesthetic Experience
> Activity has aesthetic value for the individual - that is, activities are conceived of as possessing beauty or certain artistic qualities.
>
> Physical Activity as Catharsis
> Activity is perceived to provide a release of tension precipitated by frustration through some vicarious means (such as spectator sport).
>
> Physical Activity as an Ascetic Experience
> Competitive activity, especially at a high level of achievement, requires the delaying of gratification and the ability to endure long and strenuous periods of training.

Kenyon's model has been tested many times in subsequent research into physical activity through the use of an instrument called the "Attitude Toward Physical Activity Scales", consisting of Likert and semantic differential scales. Recently, a seventh subdomain has been added which is Physical Activity Perceived as Chance.

Kenyon's model for physical activity has been used by a sociologist (Stephenson, 1978) as a means of conceptualizing the satisfactions received from mountain climbing. Stephenson interviewed in-depth twenty-four climbers who ranged widely in age and experience. She found that the six subdomains were useful for organizing the kinds of satisfactions that climbers reported, although there was some difficulty experienced with the conception of Physical Activity as an Ascetic Experience. This study confirmed the value of using a multidimensional model, since there were elements of all subdomains present in the climbers' satisfactions.

Under the direction of B.L. Driver, The U.S. Forest Service has led motivation research with respect to outdoor recreation. It is Driver's concern to know and measure the satisfactions that people derive from outdoor recreation (Johnson, 1976). This task required the assessment of the nature of recreation demand as a first step. Four types of demand were outlined: demands for opportunities to do specific activities; demands for specific resource attributes; demands for specific satisfying experiences; and demands for the physiological, psychological, and sociological benefits produced by satisfying experiences (Driver and Brown, 1975). The last two sets of demands are considered to be the most fundamental in terms of relevance to satisfaction, and (since the ultimate concern of the Forest Service is with good recreation management) in terms of assessing the productivity of a given recreation resource. Driver and Knopf (1977, p. 170) have agreed that personality variables may be more closely associated than social variables such as age and income with the significance of leisure to individuals.

Driver is currently supervising research to explore the relationship between the personality characteristics of active outdoor recreationists and

1. choice of favourite recreation activity,
2. extent of participation in various activities, and
3. specific experiences desired from participation in a given activity (Driver and Knopf, 1977, p. 170).

Personality was assessed with the "Personality Research Form", a well known inventory of twenty "need dimensions" such as achievement, affiliation, dominance, harm avoidance, social recognition, and so on. Specific desired experiences were assessed using ten "Desired Consequence Scales" developed by Driver (1975) and associates. These scales have a modified Likert format and measure the relative importance of themes such as nature experience, family togetherness, exercise, and temporary escape from social regulation as desired consequences of specific recreation activities. Tentative conclusions based on a very small sample indicated that, while personality traits do not influence the choice of recreation activity very strongly, once the choice of activity has been made, selected personality variables are strongly related to the amount of participation and the importance of particular desired consequences. Driver and Knopf (p. 190) concluded that,

> ... it is unlikely that most recreation planners and managers can gear their allocation decisions to specific personality traits of their users .... The real challenge is to define more clearly what is being "produced" in different recreation environments for different types of users ....

Whether researchers use terms such as "motivation", "value of leisure", "instrumental value of physical activity", "satisfaction", or "desired consequence", they are all addressing the question of how leisure satisfies basic needs of people who are motivated to meet those needs through leisure activity. The studies reported above are variations on the theme of motivation. Ouellet and Perron's "Risk" value dimension is equivalent to Kenyon's "Pursuit of Vertigo", both of which might be said to relate to Farina's idea of challenging Maslow's "Safety Needs". Mercer (1971, p. 271) noted the growing interest in satisfaction as a measure of success in many types of human experience.

He recommended that the previously narrow concern in recreation research with the satisfaction of people with recreation facilities needed to be regarded as only one aspect of a much wider concern with satisfaction in natural and human environments in general.

The question of satisfaction in recreation raises the controversial question of whether a need for recreation actually exists (see the discussion in Mercer, 1973, pp. 38-39). Despite the controversy, modern people continue to involve themselves in leisure activity, and more specifically in outdoor activities, in increasing numbers, all the while deriving considerable satisfaction from their involvement. The understanding of recreation behaviour is of great interest because of its importance to the understanding of human behaviour in general.

Motivations for Recreational Canoe Tripping: Statement of the Problem

This study of the motivations for recreational canoe tripping makes use of concepts from a variety of disciplines which are organized from the point of view of geography. It is assumed that canoe trippers select the northern wilderness as an environment which, in their perceptions, meets rather stringent conditions required of a location for long wilderness canoe trips which are not met elsewhere. Canoeists choose this particular recreation experience within the context of their individual personalities and their life-styles. Consequently, their recreational motivations are inter-locked with those operating in their everyday lives. The behaviour of canoe tripping gives clues as to the motivations which influence it, and motivation is ultimately worthy of study because, by understanding it, we can better understand behaviour.

This study of the motivations for taking long wilderness canoe trips attempts to answer a number of questions which are listed below:

1. Who are the people who take long wilderness canoe trips?
    a) What are their characteristics?
    b) What is their past experience with camping and canoeing?
2. What are the features of wilderness canoeing which distinguish its appeal as a recreational activity?
    a) What specific features of the northern wilderness environment appeal to canoe trippers?
    b) What benefits accrue from a long wilderness canoe trip?
3. What is a long canoe trip like?
    a) Does the experience go beyond that of paddling a canoe?
    b) If so, what sorts of experiences does it provide for people?
    c) What is the perceived role of the canoe in a long trip?
    d) What potential hazards do canoeists perceive to exist on a long trip? How hazardous are they perceived to be? When and how are they handled?
4. What are the motivations for canoe tripping?
    a) How easy is it for canoeists to identify their motivations?
    b) Do they consciously consider their motivations while planning and executing a trip?
    c) What motivations do canoeists identify as being important?
    d) Is there a motivational sequence to their trips?
    e) How committed are they to taking long canoe trips?
    f) Are motivations associated with other variables, including:
        i) characteristics of respondents,
        ii) the appeal of the northern wilderness,
        iii) the style of preparing for trips and conducting them, and
        iv) their perceptions of hazards and problems potentially encountered on a trip?

The next chapter reports on the interview stage of the study, and indicates how preliminary answers to these questions were obtained, enabling more specific questions to be asked in the questionnaire stage of the study.

CHAPTER THREE

THE INTERVIEWS

Introduction

In order to understand how recreational canoe tripping in the northern wilderness is a satisfying experience for its participants, the present study was conducted in two stages. The first stage consisted of in-depth interviews which explored the nature and meaning of the canoe trip experience for fifteen people who had taken long wilderness canoe trips. These interviews were analyzed before the second stage, a self-administered questionnaire mailed to 327 trippers, began. The topics of inquiry in the questionnaire represented a blending of the findings from the interviews with research orientations derived from the literature review. The questions asked were designed to assess certain aspects of the tripping experience for a large number of people. In other words, the interview stage contributed to the design of the questionnaire and also to the interpretation of its results through an examination of what the tripping experience meant to participants; while the questionnaire was an attempt to specify and standardize information gained from the interviews within a sound theoretical framework. The interview stage, including its analyses and findings, is discussed in this chapter; the questionnaire and two aspects of the results from the survey are dealt with in the following three chapters.

The Interview Subjects

Fifteen canoe trippers were selected as interview subjects. The number, fifteen, was chosen arbitrarily as a minimum figure for obtaining as much variation as possible in some characteristics which might have been related to their responses. These characteristics, detailed in Table 3.1, are as follows: age, sex, occupation, province or territory of residence, and number of long trips taken.

Age varied from 22 to 72 years. Only two women were interviewed, partly because it was difficult to find female trippers, and partly because evidence from personal experience as well as from the literature* indicated that the large majority of long distance canoe trippers were likely to be men. Occupations were almost exclusively those requiring university training, and within this group were many people involved in some form of teaching. The canoeists resided in four provinces/territories (Alberta, the Northwest Territories, Ontario, and Quebec), and in two centres within the province of Alberta (Edmonton and Edson). Three of the people resided in small towns, three in rural locations, and the rest in cities. The number of long trips which the canoeists had taken varied from one to more than ten. People varied in their preferences for locations and styles of canoe trips. At least two of the interviewees are well-known in canoeing circles and have influenced the tripping ideas of many people. While most of the

---

* In 1963, Study Report 3 of the US Outdoor Recreation Resources Review Commission (Wildland Research Center, p. 130) indicated that of 87 wilderness recreationists surveyed in the Boundary Waters Canoe Area, only 22 per cent were women. A study by the Canadian Wildlife Service (Carbyn and Patriquin, 1976, p. 175) of travellers on the South Nahanni River during the 1975 season counted 10 women (27.8 per cent) among the 36 canoeists. It is reasonable to suggest that the proportion of women canoeing in these well-known and relatively well-used areas is higher than in areas which are not so popular.

Table 3.1

Some Characteristics of Interview Subjects

Subject	Age	Sex	Occupation	Province of residence	Number of long trips
A	22	M	unemployed	Ontario	3
B	22	M	graduate student	Alberta	2
C	32	F	housewife, instructor	Alberta	4
D	32	M	lawyer	Northwest Territories	3
E	33	M	vice principal	Alberta	2
F	34	M	technician, instructor	Alberta	1
G	35	F	research director	Alberta	2
H	36	M	professor	Alberta	2
I	36	M	engineer	Alberta	1
J	38	M	instructor	Alberta	1
K	39	M	senior civil servant	Northwest Territories	1
L	40	M	professor	Alberta	1
M	?	M	insurance agent	Ontario	more than 10
N	59	M	retired senior civil servant	Ontario	5 or more
O	72	M	retired organization director	Quebec	more than 10

canoeists expected to take trips in the future, two did not, and four were too involved with family or work commitments to take trips in the near future. Finally, two canoeists took their most recent trip as long ago as 1971, while another had completed a trip the week before the interview.

The Interview Format

A schedule consisting of three sections was prepared to serve as a guide for the interviews. The first focussed on a particular wilderness canoe trip in order to bring back specific, detailed memories. The canoeists were asked to remember their favourite trip so that they would be very willing to talk about their experiences. The questions in this section were roughly organized according to Clawson and Knetsch's (1966) five-part model of the outdoor recreation experience. This model outlines five phases of the recreation experience which are: anticipation (including planning), travel to the site, on-site experiences, travel back from the site, and recollection (which may generate anticipation of the next experience). The two travel phases were omitted from the schedule in order to limit its focus and scope somewhat, but were frequently discussed during the interviews. The second group of questions in the interview schedule was more general than the first, and was concerned with attitudes about wilderness canoe tripping. The questions in the third group asked for socioeconomic information and details of tripping experience. In addition, in the last section, the interviewee was asked to respond to a spontaneous summary of the interview. The interview schedule appears in Appendix 2.

The interviews were conducted at the recollection stage, so the information obtained about anticipation and on-site experiences was recalled information, as opposed to what might have been expressed by respondents while their trips were in progress or in the anticipation phase. There is evidence (Peterson and Lime, 1973) that respondents to mail surveys about canoe recreation in the Boundary Waters Canoe Area were somewhat more positive toward desirable environmental conditions and less negative toward those considered undesirable when recalling their experiences in their homes than were canoeists interviewed during their on-site experiences. Peterson and Lime described this difference as one of degree rather than one of kind, and suggested the difference was so small as to be unimportant in aggregate descriptions of wilderness users. The use of recalled information may be appropriate to a motivational study. While it may never be possible to recall after an experience precisely what one's motivations and expectations were prior to that experience, it is certainly the recalled experiences which influence future decisions about whether or not to take a trip and what one wants the trip to be like. An example of the influence of recalled experience is provided in a letter which was sent with a returned questionnaire:

> Many times on a wilderness canoe trip, when the weather has been bad, insects numerous, food running low, and the terrain difficult, I have told myself that the whole thing is a form of madness, and I will never do it again. This feeling was particularly strong at one very difficult part of our trip on the Naskaupi, and for a few years after that, I did not have much desire to go on another trip.

Others have been influenced less strongly by unpleasant memories, like the following respondent who said that these memories

> ... never seem as intense as the memory of the times when you see the rocks on the river bottom racing past, ten feet down, or the days when caribou are swarming all around you.

This same respondent broke a kneecap on his first trip, with ten miles of portaging still ahead; nevertheless, he explained:

> ... this injury was not enough to prevent me from going on several more long canoe trips, or from choosing this first one for your survey as the one of which I have the most pleasant memories.

Because of the strong influence of memories on motivations for seasoned trippers, recalled information was valued highly in this study.

The interviews were intended to be relatively unstructured since their purpose was exploratory. Consequently, the schedule was used rather loosely as a reminder of certain topics in cases where conversation flowed freely, or as a guide when it was difficult to converse with the interviewee. Almost all of the questions were open-ended, and were designed to stimulate conversation which would provide ideas that could be pursued further, or which might provide answers to questions listed later on in the schedule. Burton and Cherry (1970) call this type of format the "guided" or "focussed" interview: it covers certain topics while allowing the interviewer maximum freedom in determining how to cover them, and it permits unanticipated topics to be explored if they appear to be relevant or significant. In only two cases was the schedule followed rather closely. One was the first interview, and the other was conducted during working hours with an executive who had time limitations. In four cases, question number 4 in the first section (which asked the canoeist to sketch a map of the trip in question and mark on it favourably remembered places) stimulated sufficient conversation to comprise the bulk of the interview. In the remaining cases, the schedule was followed to varying degrees. Several examples of how one question might lead to a consideration of other topics are given in Appendix 3.

The interviews lasted, on average, one hour and ten minutes. The shortest one was forty-five minutes and the longest about two hours. Each was recorded on a portable cassette recorder on ninety-minute tapes. The interviews were then typed using a cassette transcriber. A release form, displayed in Appendix 4, was obtained for each interview.

Strengths and Weaknesses of the Guided Interview

A great strength of the guided interview is the interactive format. When the purpose is exploratory, it is advantageous to the interviewer to be able to pursue ideas which are interesting, clarify vague words or statements, and encourage conversation and the attention of the subject. An example of the pursuit of an interesting idea follows:

> Interviewer: Some people have told me that when the trip is hard, little things become very important to relieve the tension and monotony of the physical strain.
>
> RESPONDENT: YEAH, IT'S STRANGE. ON THE TALTSON RIVER TRIP, X AND Y USED UP ALL THEIR TOILET PAPER IN ABOUT TEN DAYS, SO WE MADE A GAME OUT OF TRADING TOILET PAPER FOR FAVOURS. IT WAS JUST A GAME THAT WE PLAYED - A WAY OF TEASING. MAYBE IT WAS A WAY OF LESSENING THE TENSION. YOU START TALKING IN YOUR MIND ANYWAY TO THE WIND, TO THE WEATHER, TO THE COUNTRY.
>
> I: I remember you saying that you felt the wind was a force to which you were subservient.
>
> R: YOU ALMOST FEEL THAT WAY AFTER A WHILE. I FOUND ON THAT TRIP PARTICULARLY, I BECAME A PART OF THE COUNTRY.

> I: Do you think that's true more so with a trip like the Yellowknife where you really had to work?
>
> R: YES, EXCEPT THAT I'VE TAKEN A FEW OTHER TRIPS WHERE I COULD GET THE SAME FEELING BY NOT MOVING SO FAST. I THINK THAT SOME OF THE TRIPS I'VE TAKEN HAVE RUBBED THE COUNTRY THE WRONG WAY, IN THAT WE CHARGED THROUGH IT AT A GREAT RATE. THE COUNTRY DOESN'T MOVE LIKE THAT. YOU PUSH YOURSELF THROUGH A LAKE WHEN YOU MAYBE SHOULD SIT FOR A DAY AND WAIT FOR THE WIND TO GO RIGHT DOWN.

In this example, the discussion moved from ways of relieving tension on a difficult trip to a more general consideration of the canoeist's subjective feelings about unity with the environment and how those feelings are related to the pace and tone of a trip.

The following excerpt from a different interview illustrates how a meaning which is vague might be claried:

> R: A LONG TRIP IS MORE INTENSE [THAN A WEEKEND TRIP]. WHAT CAN YOU DO IN A WEEKEND TRIP? YOU CAN'T PENETRATE INTO WILDERNESS IN YOUR OWN TERMS.
>
> I: So wilderness is a function of distance?
>
> R: YES, TO THE EXTENT TO WHICH YOU ARE COMMITTED TO MAKING IT. ONE OR TWO HOURS OF HIKING OUT THROUGH DIFFICULT TERRAIN IS DIFFERENT FROM HAVING A WEEK OF FINDING YOUR WAY OUT. IT'S QUITE A DIFFERENCE. THE ONE IS JUST A LITTLE BIT OF ENDURANCE. THE OTHER IS REALLY SURVIVAL.

To the person being interviewed, his statement, "You can't penetrate into wilderness in your own terms", was probably very clear in its meaning. To the interviewer, it was vague. Further questioning elicited the information that penetrating into wilderness requires a commitment to self-reliance and survival which is not required on a weekend trip.

Conversation is encouraged by personal contact with the interviewer, who ideally should be attentive, alert, and personable. The more familiar the interviewer is with the topic at hand, the more information can be obtained within a short time, since the interviewer and respondent have a common working language. As the interviewer in this study, I had a great deal of familiarity with the topic of canoeing in general and some experience with canoe tripping, including having taken one month-long wilderness canoe trip in the central Northwest Territories.

Unfortunately, the interactive format of the guided interview, which may be considered to be its strength, may be called a weakness from a different point of view. Not all the ideas which emerge during the course of an interview can be pursued; the ones which are followed up are most likely to be those which are salient to the researcher rather than to the subject, especially if the researcher is not a sensitive interviewer. The following excerpt from an interview illustrates the interviewer's insensitivity:

> I: Were you fairly happy with that choice of location for your trip?
>
> R: I WOULD HAVE PREFERRED AN EASIER TRIP. I TOOK THIS TRIP FOR LARGELY PERSONAL REASONS AND I DON'T KNOW IF THIS PARTICULAR TRIP WOULD HAVE HAD MUCH TO DO WITH IT EXCEPT FOR THE LEGENDS.
>
> I: You would have preferred an easier trip at the time you were doing it, or in retrospect?
>
> R: I WONDER IF I SHOULDN'T TALK FIRST ABOUT MY OWN PARTICULAR REASONS?

Luckily, in this case the interviewee insisted on discussing the issues which were important to him.

Because of the rapport developed through interaction during an interview, it is easy for the interviewer to assume that she understands clearly what the respondent is saying. However, the listener's interpretation of a meaning often is not the same as the speaker's intended meaning. In the example below, there is a subtle difference in meaning in the two ideas represented by what the canoeist said and what the interviewer interpreted:

> I: What would you look for in another trip?
>
> R: ... DEPENDING ON WHETHER I WAS GOING ALONE OR WITH MY FAMILY, I WOULD JUDGE THE DIFFICULTY OF THE WATER I WAS LOOKING FOR.
>
> I: Meaning, that if you were not with your family you would look for more difficult water?
>
> R: THE OTHER WAY AROUND. I WOULD CHOOSE SAFER WATERS WITH MY FAMILY IN THE CANOE.

In the interviewer's interpretation, the canoeist has more demanding expectations for trips he does without his family; while in his own mind, the more stringent conditions exist for a trip with his family. In this example, the meaning was clarified immediately after the interviewer re-stated the response in her own words. (This example points out the useful function of re-statement during an interview.)

While one's intent during an interview is to encourage conversation, the attempt to do so may result in the interviewer doing too much of the talking or establishing "over-rapport" (Burton and Cherry, 1970). If the interviewer is too talkative, she may express opinions or attitudes which might influence the subject's subsequent remarks. If over-rapport is established, the subject may give a response which is expected to please the interviewer, as illustrated overtly in the example below:

I: Why would you not think it important to take a guide with you when you're going into unknown country with a number of hazards?

R: WELL, BECAUSE YOU DON'T HAVE AS MUCH CHALLENGE THAT WAY. I WANT TO DO THE THINGS MYSELF, NOT HAVE SOMEONE ELSE DO THEM FOR ME.

I: That's what I thought you'd say.

R: I THOUGHT YOU'D THINK SO.

Even though these weaknesses may exist, it is possible for the interviewer to check possible misinterpretations by using the interactive format to advantage. In each interview, the subject was given the opportunity to respond to a brief interpretive summary done spontaneously at the end of the interview. Below is an example of one such interpretive summary and the subject's response to it:

I: You seem to be quite committed to wilderness, although I wouldn't say you're typically fanatical about it, because you don't mind meeting people very much, and you've gone to areas that aren't the true wilderness that people talk about. I think one of the big attractions of trips like this for you is the opportunity to get away from people, the canoe being a means of doing it, and to be able to get into a kind of immediate, day-to-day existence where you are immersed in the total experience of the trip, and able to forget about the sorts of pressures that you have in your normal everyday life at home. And you have some curiosity about what different areas are like; you seem to be very happy to go on trips that are different in character from ones you've taken, and you look forward in the future to being able to go to places that you haven't seen before.

R: YES, I THINK THAT'S IT. NOT ONLY GETTING AWAY IS ONE OF THE REASONS WE GO, BUT THE SCENERY. I THINK THAT'S JUST AS IMPORTANT AS GETTING AWAY. WE WANT TO SEE DIFFERENT PARTS OF CANADA AND WHAT THEY LOOK LIKE. SO I THINK THAT'S JUST AS IMPORTANT AS THE BREAKS.

During the interview with this subject, the aspect of "getting away" was emphasized somewhat. From this response to the interpretive summary, it is apparent that emphasis was likely a result of the way that the interview happened to proceed rather than a result of the subject's motivational priorities. In the analysis stage, the desire to see scenery in different parts of Canada could take its proper place because of this response.

In summary, the interactive format of a guided interview has distinct advantages for use in an exploratory study, providing that the interviewer can capitalize on the strengths of such a format, and avoid some potential misuses of interaction with the subject.

Analysis of the Interviews

The interviews were transcribed soon after they had been completed, insofar as this was possible, so that the interviewing technique could be informally evaluated in an on-going way. Following transcription, two types of content analysis were done for each interview. The first was a checklist of details; the second was an interpretive summary. For the checklist, thirty-two categories were derived from the schedule, according to which every unique response an interviewee had made to every question could be recorded. Some examples of category titles are:

- Age
- Sex
- Occupation
- Club Affiliations
- Name of river
- Reasons for location
- Memorable places
- Hazards
- Meeting others
- Features to repeat
- Weekend vs. longer trips
- Motivations

The final category was labelled "Other" to accommodate responses which could not be included under specific categories. The checklists for all the interviewees were combined in a chart with fifteen names listed on the vertical axis and thirty-two categories on the horizontal axis. Some of the cells in this chart had no entries because the schedule had not been followed in every case. Some cells had many more entries than others. An example of the information contained in one of the rows of the chart (that is, all the information for one subject) is given in Appendix 5.

While the analysis described above gave each interview detailed coverage by providing a list of each unique, relevant unit of information mentioned, it did not give any information about what importance the subject appeared (to the interviewer) to attach to the items which were mentioned. This task was done in the second content analysis, the interpretive summary. For this summary, each interview was interpreted subjectively in the following manner. As the interview was read, a list was compiled of statements made by the subject which might be relevant to his or her motivations. Some examples of such statements appear below:

> R: IN MY PATTERN OF TRIPPING, I TEND NOT TO SAY, "I'M GOING HERE BECAUSE OF CERTAIN FEATURES ON THAT PARTICULAR RIVER". I WANT TO LINK THEM ALL TOGETHER, SO I TAKE IT AS IT COMES, EVEN IF IT THROWS IN SOMETHING HORRIBLE LIKE LAKE WINNIPEG. IT ALL FITS IN THE OVERALL PATTERN. I'VE GOT TO TAKE IT ALL.

> R: SURE, I CAN TELL YOU WHY HIKING IS NOT OUR THING: I'M A VERY POOR BACKPACKER. I CAN'T CARRY MUCH WEIGHT. IT'S PHYSICALLY EASIER FOR ME TO CANOE. CLIMBING HAS NEVER APPEALED TO US - I'VE GOT A FEAR OF HEIGHTS. SO I GUESS IT JUST TURNED OUT THAT CANOEING WAS THE THING WE BOTH COULD DO.

> R: THE BASIC THING IS THAT I WANT TO GET AWAY FROM THE HURLY-BURLY OF LIFE AND BE ALONE, FREE FROM EVERYDAY REQUIREMENTS OF TELEPHONES AND PRESSURES. I CAN GET THE SAME SORT OF FEELING OF BEING OUT OF

> CONTACT WITH PEOPLE BY TAKING AN AIRPLANE RIDE, OF ALL THINGS, BECAUSE I KNOW NO-ONE CAN FIND ME IF THEY WANT ME.
>
> R: I'VE FOUND THAT I DON'T CARE FOR MOST OF MY PICTURES BECAUSE I TOOK TOO MANY SILLY PICTURES OF SCENERY. I THINK THE PICTURES SHOULD BE TAKEN OF THE PEOPLE BECAUSE THAT'S THE ONLY THING THAT MEANS ANYTHING TO ME.

For the first canoeist, particular types of conditions along the way (such as presence of insects, availability of firewood, level of difficulty of the water encountered, or specific types of scenery) are not nearly so important as the experience of tripping itself and the end goal of creating a pattern with those trips. The person in the second example seems to value the outdoor experience primarily and the canoeing experience secondarily. In other words, the canoe is a suitable means of access to a wilderness environment where the outdoor experience can take place. The third excerpt emphasizes the desire to get away from the pressures of a demanding life, but this interpretation must be tempered by the circumstances of the interview, which took place in the subject's office on a busy working day. For the canoeist in the final example, the importance of social experiences on a trip far outweighs the importance of the specific location and its scenery.

As the list of statements relevant to motivations was compiled, it was evident that the information provided in each interview had a high degree of internal consistency. That is, the descriptions which an individual canoeist gave of different aspects of a trip seemed to fit with one another, and those descriptions corresponded closely with motives which were expressed. For example, the motives of one interview subject appeared to be dominated by a desire for challenge and adventure, as well as the achievement of having travelled (according to the claim of his group) the most Arctic canoe miles of any recreational canoe trippers. The trips his group has chosen have been demanding, including one nine-week trip, and one involving 340 km. of upstream travel. The group takes a trip every year, and various members write magazine articles to publicize their trips. Group members have also made movies of some trips which they show to interested people. This canoeist keeps abreast of new developments in equipment, and has used and advertised a tripping canoe made of a new material (ABS) which best withstands the battering associated with tough use.

Another interview subject was different in every respect. He had been experiencing the trauma of divorce at the time of his first trip, and took the trip likely as a diversion from this concern, and because "I didn't care if I lived or died". He was terrified at the beginning of the trip, and found as it progressed that each small success, such as accomplishing the first long portage or running a rapid successfully, contributed to his growing self-confidence. He described his trip as a series of hurdles which were successively met and conquered; and at its completion, he was a different man. All the same, he thinks he would have preferred an easier trip for his first one. He has gone on a few trips since, but has postponed plans for future trips due to responsibilities of a new family.

Internal consistency in each interview contributed to the development of a feeling for the motivational themes which appeared to predominate for each individual. As an additional aid to interpreting the interviews, special attention was given to the responses to the spontaneous summaries made during each interview. In eight cases it was possible to designate two to four major themes and perhaps some secondary themes which could be well supported by statements made during the interviews. For example, one individual was said to be motivated to take long canoe trips by (a) a desire to see new and interesting scenery, (b) the wish to escape civilization, and (c) a distinct preference for outdoor physical activity. All three motivational themes contributed to the choice of a long canoe trip as a suitable recreational activity; and all three could be easily supported by reference to numerous specific discussions about all aspects of tripping in the interview.

In the remaining cases, the unique development of each interview did not permit the designation of major motivational themes. In one case, the motivations were too numerous to be confined to a few themes; instead, a list of the motivations was compiled. In two cases, it was appropriate to describe the sequential development of motivations throughout the planning and on-site experience phases. For another subject, it was more appropriate to describe his motivations as an interplay of "push" forces ("getting away from the hurly-burly") and "pull" forces (being self-reliant in the wilderness). Another summary was an attempt to describe the interrelatedness of ideas evident in the subject's movie of his trip, and of the canoe trip artifacts displayed in his home.

In all cases, verbatim statements from the interviews were used to illustrate and support the interpretations. It is important to remember, however, that the interpretive analyses summarize my interpretations of the interviews, rather than the canoeists' motivations. An example of an interpretive summary appears in Appendix 6.

Findings of the Interviews

The motivational themes which were derived from the interviews are listed below, in order of the number of interviewees for whom they appeared to be meaningful, from most frequently mentioned to least frequently mentioned:

1. Self-reliance
2. Seeing new and interesting country
3. Physical exertion
4. Alternative life-style
5. Social experiences
6. Practicing camping and canoeing skills
7. Enjoyment of planning
8. Sense of accomplishment
9. Escape
10. Historical interest
11. Meeting challenges
12. Being part of the country
13. Re-creating the experience of being an explorer
14. Adventure
15. Publicity

These themes were commonly expressed by many of the canoeists. For example, the attractiveness of the contrasting life-style required in the canoe trip situation was specifically mentioned by nine of the fifteen interviewees. However, each of the nine people described the features of the life-style which they liked in somewhat different ways. The motivational themes which were drawn from the interpretive summaries are described below; for each of the themes, the variations in meaning given it by individual canoeists are mentioned. Some of the themes overlap in meaning; where this occurs should be apparent to the reader throughout the description. An example of overlap is provided by the themes of "alternative life-style" and "escape". Canoeists seeking an alternative life-style may be escaping from certain aspects of their normal lives. Nevertheless, those who express a motivation as a desire for a way of life are experiencing an attraction or "pull" toward a positive attribute of the recreational experience; while those who express their motivation as the desire to escape are being "pushed" by a negative attribute of "normal" life.

All but one of the interviewees mentioned the appeal of self-reliance as required on long canoe trips. For one subject, this meant:

> ... having to do everything for yourself. If you don't make your own supper, you won't eat. If you don't pitch your tent, you won't have a place to sleep. If you don't paddle, you won't get anywhere.

To another, it meant "being on your own devices" if any trouble arose on the trip; and to several others, being self-reliant involved having the resources within one's group to meet unknown challenges along the way.

A popular theme, mentioned by ten people, was the attraction of seeing new and interesting country. Only a couple of people used "beauty" as a criterion for desirable scenery. Most seemed to value seeing something that had interest because it was different from what they were used to or what they had seen before, or was something that many other people were not likely to see because of the effort required to see it.

The physical exertion required by a long trip also was mentioned by ten people, including both men and women. The degree of commitment to this aspect of tripping ranged from a preference for being physically active, to a commitment to physical fitness as a means to an active way of life, to a desire to experience great exertion in contrast to the minimal physical effort required for everyday life.

Nine canoeists were strongly attracted by the alternative life-style characteristic of a long canoe trip. All of these people enjoyed the total involvement in a day-to-day existence which had little room for thoughts about one's life at home. Some said that a sense of timelessness develops from the lack of urgency present in the "civilized" world, and that this was the basis for total relaxation. A few of the canoeists said that decision-making was entirely different on a trip than in their normal lives, although they had varying opinions as to what constituted the distinction. For some, decisions were more compelling on a canoe trip because their consequences were related to survival, while one woman saw decisions as being "part of the fun". Several people appreciated that consequences of decisions were immediate and easy to identify. Finally, the simplicity of this life-style was appealing to many people. One man said that one becomes animalistic, "less cerebral", on a canoe trip; while another described the simplicity of life by saying that as his trip progressed, he began to live day-by-day, accepting, enjoying, and responding "instinctually" to the eventualities of each day. Several related the simplicity of life to the nature of tasks to be done, which involve feeding oneself, finding suitable campsites, advancing a number of kilometers per day, and getting along with one's small group of chosen companions.

For eight people, the opportunity to share a trip with a group of good companions was a strong motivation. Five of these were members of informal groups which met regularly either for trips or for other activities. These people emphasized that their companions "knew what was involved" or "behaved in a predictable way". Further, the competence of one's companions was highly valued. For the other three canoeists, competence, amiability, and the ability to participate in stimulating conversation were important.

Eight of the canoeists mentioned the importance of camping and canoeing skills as an aspect of their motivations. Only one saw a trip as an opportunity to learn skills, while the others emphasized the importance of learning skills beforehand and having them well practiced for the trip. For all but one of the eight, a trip was an opportunity to exercise valued skills because these skills were critical for survival. The one exception tended to view canoeing skills as an extra which enabled him to do the trip "in style" but which were not essential for getting through.

The importance of planning was evident for eight people. One man thought that attention to the details of planning a trip contributed to the feeling of self-reliance. Others enjoyed it because it heightened pleasurable anticipation of the trip.

Eight interviewees enjoyed the sense of accomplishment in completing a long canoe trip. One of them said that reaching his destination safely gave him the feeling that he had "achieved something worthwhile", whereas success in his everyday life was not so easily measured. Several others were proud to have proven to themselves and others that they could successfully complete a trip. One person had canoed the freshwater Northwest Passage over a number of years; and another had been part of the first Canadian party to canoe the Back River.

Escape was mentioned as a motivation by seven people. They used trips to escape from a variety of things, including a recent divorce, societal pressures which prevented one from living a simple life, the urgent demands of telephones and deadlines, and the type of security inherent in civilized life.

Seven people were fascinated by the historical aspect of canoe tripping. They spent considerable time reading original journals of explorers, reading accounts by trappers and other adventurers, learning about traditional Inuit culture, and searching for and investigating historical sites.

Meeting the challenges of a long canoe trip was attractive to five of the interviewees. The challenges were physical, social (getting along with companions), emotional (keeping up one's morale and determination), and skill challenges.

Five people mentioned a desire to "experience the Barrens" or "be a part of the country". A long canoe trip was suitable for attaining this experience because it allowed one to experience remoteness, to see the country close up and at slow speed, to develop a rhythm with the country necessitated by exposure to the weather, and to pass through leaving little or no evidence of having been there.

For five people, there was an element of discipline in a canoe trip which may not have amounted to a motivation but which was part of their attitudes about what canoe trips should be like. These five were among the older interviewees, and all but one were very experienced. Discipline involved one or a combination of established routines, physical preparation of skills and stamina for the trip, the submerging of personal worries or discomforts for the good of the group, and setting a fast pace for the trip out of preference.

Re-creating the feeling of being an explorer - the first one down the river - was an important motivation for four people, even if they realized that the feeling was an illusion. For one man, experiencing the hardships of a trip gave him spiritual contact with the explorers, whom he had carefully researched. In addition to these four, one man preferred to travel as the early trappers had, at least in regard to the type of food taken.

"Adventure" was a word used by four people. I believe that it meant engaging in a totally involving experience which was very different from one's normal life and which lacked the securities of home. Two of these adventurers regarded the one trip they had taken as a once-in-a-lifetime opportunity, while the third was a very experienced tripper who remembered vividly the sense of grand adventure present at the beginning of each trip as the plane took off after having deposited the travellers on some remote lake.

One canoeist valued his well-publicized trips for bringing desirable attention to his private business.

Five of the canoeists remarked upon a change in their motivations as they grew older, as they acquired new companions, or as they completed trips which broadened their experience with tripping.

A summary of the detailed content analysis is not presented here, since it is not amenable to being summarized. The description of how the results of both analyses were incorporated into the questionnaire is included in the next chapter.

Limitations of the Interviews

The fifteen in-depth interviews suggested a wide range of attractions that long wilderness canoe trips might have for some people. However, there was a point beyond which having continued to collect these unique events would not have contributed to understanding, but confused instead. This is because questions were rarely asked with the same wording or in the same context, and they were asked in some cases but not in others. So, while it was possible to record that ten interviewees mentioned an attraction to the physical exertion required on a long trip, it would not have been meaningful to conclude that the motivation of exertion was important to two-thirds of the respondents. Whether or not that motivation was mentioned may have been a function of how the interviewer pursued the questioning rather than dependent upon what motivations were most salient for the interviewees.

Another reason why making a statement about the proportion of respondents to whom a motivation is important is unjustifiable is that such a statement almost makes an inference about proportions in the larger population of wilderness canoeists of which the fifteen interviewees are a small part. Fifteen cases form too small a sample from which to generalize, or even to think in terms of proportions, despite the existence of some similarities and consistencies of expression among the fifteen.

Since the intent of the study was to develop ideas about why a population of canoeists is motivated to take long trips in the northern wilderness environment, a step which went beyond the interviews was necessary. The questionnaire, which could collect information from many more people, and which asked the same questions of everyone, took this further step. It may be argued that questionnaires are unique events also, because each respondent answers under different conditions, and interprets each question according to individual experience. In the same way, it might be suggested that interviews are not perfectly unique if the same person conducts and interprets each one. However, if one pictures a continuum with the quality of uniqueness on one end and that of uniformity on the other, these two instruments are well separated from one another. Consequently, they were reasonable choices to make in the light of the purposes set for them and the "real world" conditions in which they were to be applied.

CHAPTER FOUR

THE QUESTIONNAIRE SURVEY

Introduction

The formulation of the questionnaire using the information from the interviews was a crucial step in the two-stage design of this research. The interviews had provided fifteen different sets of information about why people found the experience of canoe tripping in the northern wilderness to be satisfying and, therefore, about why they might want to participate in that kind of experience again. These sets of information contributed to the formation of some ideas about canoeists' motivations which needed to be specified, organized, and standardized in order to incorporate them into a meaningful questionnaire which could be sent to a large number of canoeists. The formulation of the questionnaire is discussed in this chapter, as well as the procedures by which the mail survey was conducted with 327 canoe trippers.

Formulation of the Questionnaire

The unique personality of each interviewee was readily apparent in the transcripts from each of the interviews. Because each interview was unique and internally consistent, there was a desire to construct the questionnaire so that, as much as possible, personal characteristics could emerge there also. If respondents could give evidence of their personalities, there would be sharper differentiation among them. Further, it might be possible to check for internal consistency during the analysis as one test of whether the questionnaire was really measuring what it set out to measure. Consequently, open-ended questions were used in some cases. In addition, canoeists' motivations were sought both in direct and indirect ways. That is, some questions asked directly about motivations, while others asked about aspects of the tripping experience which might be related to motivation.

This aim for the questionnaire suggested that it should be divided into sections: one on motivations, and others concerning different aspects of the canoe trips. Clawson and Knetsch's model of the recreation experience (discussed in Chapter 3) provided a focus for each of three sections: these were the phases of anticipation, on-site experiences, and recollection. A further section was devoted to assessing past experience of the respondents which could be related to canoe tripping, and another to collecting socioeconomic information. A seventh section of open-ended optional questions was added. It included two questions which were very interesting, but not central to the study; as well as one question which was designed to learn if respondents thought the division of a trip into three parts according to the Clawson-Knetsch model was appropriate. It was hoped this last question would provide feedback on the way in which the entire study had been conceptualized. Finally, since there had been so much variation among the interview subjects in their views about acceptable environmental conditions for a wilderness trip, a section was included to find out how stringent the conditions of wilderness were for respondents' trips.

While material obtained from the interviews guided the organization of the questionnaire, it became specifically useful for determining the content of the sections and in formulating individual questions. The chart comprising the detailed content analysis of the interviews was surveyed for every new idea that appeared as each column was read.

These ideas were recorded in related groups on separate pages. Each page was then summarized with a title, such as "Attitudes Toward Planning", "Nature of Trip Experience", "Reasons for Keeping a Log", and so on. A question was written for each group, guided in its intent by the summarizing title, and in its style by a preference for simple, direct language. As far as possible, the words of the interviewees were used. The interpretive summaries were re-read to check on whether the questions preserved the meanings of the original statements.

The questions were then sorted into relevant sections, and the sections ordered in a sequence, as shown in Table 4.1. The introductory page of "General Directions" included the assessment of wilderness conditions of respondents' trips discussed earlier. The following four sections were sequenced chronologically, beginning with "Past Experience". For easy understanding, "anticipation" was changed to "Planning Your Trip"*, "on-site experiences" became "The Trip in Progress", and "recollection" was renamed "Remembering the Trip". The questions on "Motivations" were placed after the section on remembering in order to give the respondents specific experiences to guide their thinking about these difficult questions. The relatively uninteresting group of questions about socioeconomic details, titled "Profile Information", followed the others. The three "Optional Questions" were placed at the end of the questionnaire so as not to confuse the respondent about what constituted the core of the study. Short, summary descriptions were then

---

* This change may have been ill-advised, since some respondents distinguished between planning and preparation, and several others mentioned the importance of anticipation and dreams.

Table 4.1

Composition of the Questionnaire

GENERAL DIRECTIONS

Minimum conditions met by trips

SECTION 1: PAST EXPERIENCE

Camping experience
Canoeing experience
How canoeing was learned
Canoe tripping experience
Sequence to canoe trips
Role of canoe trips in life

SECTION 2: PLANNING YOUR TRIP

Minimum conditions for trips
Preferred party size
Perceived role of planning

SECTION 3: THE TRIP IN PROGRESS

Other activities enjoyed on trip
Perceived role of canoe
Perceived seriousness of hazards
Attitudes toward problems
Description of the trip experience
Preferences for organization

SECTION 4: REMEMBERING THE TRIP

Emotions at end of trip
Benefits of the trip
Substitutable activities
Purpose of written records
Nature and frequency of memories

SECTION 5: MOTIVATIONS

Motivations
Ranked motivations
Perception of motivations
Appealing features of trips
Ranked appealing features

SECTION 6: PROFILE INFORMATION

Sex
Age
Marital status
Parental status
Education
Occupation
Income
Childhood setting
Club affiliation
Function of club

SECTION 7: OPTIONAL QUESTIONS

First long canoe trip
Comparison with short trips
Usefulness of three-part model of recreation experience in study

written for each section.

A covering letter was written. Its purpose was to explain what was being asked of the respondents, to establish who was doing the asking, and to develop some degree of rapport by using an informal, friendly, and considerate tone which would be maintained throughout the questionnaire. Further, a résumé of the results of the study was promised to those who wished to receive it.

This first draft of the questionnaire was typed and photo-copied for the pre-test.

The Pre-Test

A pre-test is the "initial testing of one or more aspects of the study design" (Babbie, 1973, p. 205). Babbie (1973, p. 207) suggested a single guideline for the selection of subjects to pre-test a questionnaire: "They should be reasonably appropriate respondents for the questions under consideration". A good test requires a broad range of respondents rather than strict representativeness.

The choice of respondents to pre-test this questionnaire was limited by more than Babbie's proscription. The total number of potential respondents for this survey (327) was too small to warrant a full-scale pre-test which would use up a large proportion of respondents. In addition to this constraint, the usefulness of speaking personally to the pre-testers was recognized; therefore, pre-testers had to be within the vicinity of my home. Of the 14 people chosen, 7 would have qualified as respondents. They were asked to complete the questionnaires as if they had received them in the mail, to record the time required for their completion, and to note the questions of which they had some criticisms, as well as those which they felt could be omitted. Three other pre-testers had varying amounts of experience with short canoe trips. Another was a climber who was known to have extreme views on wilderness recreation and preservation. Finally, 3 academics involved in administering questionnaires responded to aspects of design and format. Five of the pre-testers held jobs related in some way to outdoor education. The remainder varied somewhat in their occupations, although professional teachers were predominant. Their ages varied from about 20 years to about 45 years. Two of the pre-testers were women. Table 4.2 presents some characteristics of pre-test subjects.

The questionnaire was delivered personally to each of these people, and an appointment was made to pick it up and receive comments. A few people thought the questionnaire was too long; however, no-one could suggest which questions might be omitted. One question had some obvious difficulties, and was subsequently dropped. Some others were substantially revised. Notably, the original expressions of the interview subjects often had to be changed because they were too personal to be meaningful to others. In summary, the changes which were made as a result of the pre-test were primarily changes in question wording. This type of change was minor in the context of the whole questionnaire, but significant in terms of the validity of responses to individual questions and in terms of the overall credibility respondents might have attached to the questionnaire.

Typing, Printing, and Mailing the Questionnaire

Decisions about the format and design of the final draft of the questionnaire were guided by two objectives: to give it an attractive,

Table 4.2

Some Characteristics of Pre-Test Subjects

Subject	Sex	Occupation	Relevant interests	Canoe experience
A	M	outdoor education consultant	canoeist, experienced instructor	many short trips
B	M	recreation professor	questionnaire administration	none
C	M	geography professor	questionnaire administration	none
D	F	research chemist	President of canoe club	one long trip many short trips
E	M	geography graduate student	questionnaire administration	none
F	F	geography graduate student	sky diver, whitewater canoeist	some short trips
G	M	radiation control technician	canoeist	some long trips many short trips
H	M	technician	canoeist	one long trip
I	M	outdoor education graduate student	canoeist, experienced instructor	some long trips many short trips
J	M	education student	canoeist, experienced instructor	some long trips many short trips
K	M	psycholinguistics graduate student	climber	none, many climbing trips
L	M	outdoor recreation professor	canoeist, interest in recreation motivation	some short trips
M	M	engineering professor	canoeist	some long trips many short trips
N	M	economist	canoeist	one long trip many short trips

interesting appearance so that recipients would want to complete and return it; and to make it easy to follow so that they would be able to complete it with minimal frustration or confusion. A copy of the final draft, including the covering letter, appears in Appendix 7.

In order to meet the first objective, a 7" x 8 1/2" booklet format was used. Not only is this a small, personal size which can be handled easily by the recipient, it also appears to be smaller in the volume of work to be done*. Since the questionnaire was nineteen pages long, this latter advantage of the small size was thought to be significant. The last page was blank (and was used occasionally for additional comments by respondents). The covering letter was typed on letterhead stationery from the Department of Geography. It was kept separate from the booklet so that respondents could keep it for future reference. A detailed description of how the questionnaire booklets were produced, including selection of paper, typing, reduction, and collation, is presented in Appendix 8.

In order to meet the second objective of helping the respondent to follow and understand the questionnaire, several steps were taken. As mentioned earlier, the questionnaire was prepared in sections which followed a logical sequence. Sections were numbered, named and underlined. The topic of each one was briefly described. Questions in each section were typed so that entire questions could be included on a single page. Where a question was too long to permit this, it was placed so that it would occupy two facing pages when the booklet was opened. Directions for each question were typed in capital letters to separate them from the questions themselves which were done in lower case letters. Key words in the directions were underlined. In questions which were to be answered by a portion of the respondents, an arrow technique was employed to direct people away from reading questions which were not pertinent to them.* Closed parentheses ( ) were used to guide the placement of check marks beside response categories (Babbie, 1973). Pages were numbered continuously throughout the questionnaire rather than by section so that respondents would be less likely to miss questions by turning several pages at a time.

---

* Hendee (1967) also used reduction to cut down bulk and apparent size.

In the assembling and mailing of the questionnaires, attention was given to details designed to secure as high a response rate as possible. Addresses on the envelopes, as well as the greetings on the covering letters, were hand-written. A stamped, self-addressed envelope was provided with each questionnaire. (The U.S. postage was purchased through an American resident, and international reply coupons were sent to European residents.) Postage was hand-affixed rather than bulk-stamped (Champion and Sear, 1969). Hand-affixed postage also increased the probability that undeliverable mail would be returned, thereby enabling a more accurate estimation of the true rate of non-response (Hendee, 1967).

To further encourage response, a follow-up letter was mailed to everyone who had not sent a request for a résumé or signed the questionnaire. This letter was an appeal to those who had not yet returned their questionnaires to do so. It was typed in the same style as the covering letter had been, and was mailed about three weeks after the questionnaire had been sent. There is much support in the literature for the effectiveness of follow-up mailing (see for example, Clausen and Ford's (1947) discussion of the effects of follow-up letters on return rates, and therefore, on non-response bias). A copy of the follow-up letter is shown in Appendix 9.

---

* The design of contingency questions is treated by Babbie (1973, pp. 146-150).

The Survey Frame

1. Sources of the Survey Frame

There is no single list, nor are there comprehensive partial lists, of people who engage in long wilderness canoe trips. This is so for several reasons. Access to almost all of the suitable locations for trips is totally uncontrolled, and the many possible locations in Canada are spread over thousands of kilometers. Roads may provide access to some river systems. For access to remote locations, canoeists may use private planes as well as established commercial companies. Further, many wilderness canoeists are independent in spirit, disdaining club membership and sometimes even refusing to register their trips with the RCMP.

Consequently, many sources had to be canvassed for names and addresses. Personal friends and acquaintances who knew of other canoeists were asked for names. Some of the interviewees contributed names. There are many popular magazines which have published articles about long canoe trips written by expedition members. Letters were written to magazine editors asking for addresses of these authors. Some of the authors furnished more names and addresses. Letters were written to canoe clubs in Ontario, Alberta, and British Columbia asking for names.

Copies were obtained of trip registration forms filed with Yellowknife RCMP in 1977. Wardair and Gateway Aviation were asked for names of canoeists who had chartered their aircraft, although the latter company did not release clients' names. Letters of request for information in the files of TravelArctic in Yellowknife were surveyed for names and addresses. Care was exercised in their selection as a request for information about a potential trip did not ensure that the trip would be made. Copies of travel permits issued for the Thelon Game Sanctuary, through which the Thelon River flows, were obtained and used as sources primarily when the name of at least one permit holder could be identified as that of a canoeist. Respondents to the questionnaire provided further contacts. Table 4.3 indicates how many names were obtained from each source.

There are two other potential sources for names which were not canvassed for this study. The first, the Hudson's Bay Company's U-Paddle Canoe Rental Service, was omitted by neglect. Journals of canoe trips constitute the second potential source. In some cases, I was able to meet the writers of journals which were available to me, so their contributions to the mailing list are included under "Personal contacts". Several names were found in journals and logs read in the TravelArctic office, which keeps a file of these documents, and they are mentioned under "TravelArctic". Some other journals which were read did not include addresses (which were located in some instances from other sources) or even the authors' names.

The questionnaires were sent to five countries, the largest proportion being mailed to Canadian and American addresses. Table 4.4 enumerates their distribution.

Table 4.3

Sources of Names and Addresses for the Survey Frame

Sources	Number of names*
Personal contacts	112
TravelArctic	53
Clubs	41
RCMP	30
Letters from authors	19
Magazines, newspapers, books	16
Respondents	16
Thelon Game Sanctuary Travel Permits	14
Wardair	6
Total	307

* These numbers represent the net totals after subtracting 20 undeliverable questionnaires.

Table 4.4

Destinations of the Questionnaires

Country of destination	Number*
Canada	150
U.S.A.	135
Sweden	16
Germany	3
England	3
Total	307

* These numbers represent the net totals after subtracting 20 undeliverable questionnaires.

2. Biases in the Survey Frame

This survey was conducted among all members of the population of wilderness canoeists whose names and addresses could be found. Consequently, the mailing list for the survey is identical to the survey frame. Survey frames are subject to five potential defects: they may be out-of-date; inadequate, if they do not include all categories of data required for the survey; subject to duplication of units; inaccurate, if information about the units is wrong; or incomplete, if some units are omitted from tne frame (Burton and Cherry, 1970). It is impossible to know how these defects affect the findings of this survey, because there are no comprehensive lists available of all people who have taken long wilderness canoe trips. Nevertheless, it is possible to suggest how some defects may have occurred.

The survey frame was not out-of-date. It is unlikely that the frame was inadequate, or that it duplicated some units. It may have been somewhat inaccurate since many names were obtained by hearsay from people who may not have understood clearly the requirements for participation in the survey. Names also were obtained from sources (such as the RCMP registrations) which did not discriminate between wilderness canoe trippers and other wilderness travellers, and sources (such as the Travel-Arctic files) which may have indicated intentions to take a trip rather than the completion of any trips. Fortunately, those respondents who did not fulfill the requirements of participation could be identified from information in their questionnaires. Non-respondents who did not qualify could not be identified, except for three people who returned their questionnaires unanswered for that reason.

It is very likely that the survey frame was incomplete. This defect resulted from possible over-representation of some types of respondents (namely, trip leaders, females, and club members), and the consequent under-representation of others (non-leaders, males, and non-members of clubs). These potential biases are discussed below.

It is possible that the survey frame favours trip leaders, or at least those in the canoe party who are best known. This bias likely is not very strong. To begin with, not all canoe parties have a single identifiable leader. Further, in many cases names of entire parties were obtained. In only one of the RCMP registrations was the leader's name the sole name listed; in this case, the names of his companions were volunteered by the leader in his questionnaire. The people who submit articles to magazines are not always leaders, although they may become the best known. Most of the authors forwarded the names of their companions. In each of three of the Thelon Game Sanctuary travel permits, only one name had a complete address. These names may have been those of party leaders or of group members charged with the responsibility of obtaining permits. The same likely is true for the contacts from Wardair and for letters requesting information from TravelArctic. It may be argued in the case of TravelArctic that the persons making the initial requests for information are likely to be the initiators of the trip. But trip initiators are not necessarily trip leaders. Generally speaking, responsibilities for organizing a long canoe trip are divided among the group members according to their respective talents, desires, or available time. Responsibility for contacting agencies may not always fall to the leader of a trip. Most personal contacts furnished the names of all party members, although there was some tendency to name leaders. This happened in ten known cases.

There is some indication that this sort of bias more significantly influences socioeconomic characteristics of the survey frame than its attitudinal characteristics (Jubenville, 1971). It is uncertain how this bias might affect motivational dimensions of the respondents, but easy to surmise that its effect on these dimensions might be more pronounced than its effect on attitudinal characteristics.

Sex is the second area where bias may exist. When it became apparent that very few female names were forthcoming, it was considered that if there were a tendency to over-represent leaders in the survey frame, women might be under-represented. Two female authors of magazine articles, both of whom happened to be Outward Bound instructors in the U.S., were approached for the names of women canoeists. The result is a disproportionately high number of American women compared with Canadian women, as depicted in Table 4.5, and of women whose views might be biased toward the Outward Bound philosophy. The proportion of 10.0% women in the

Table 4.5

Proportion of Women Surveyed by Country

Country of origin	Number in survey frame* n	Number of women surveyed n	Percentage of women surveyed %
U.S.A.	135	25	18.5
Canada	150	15	10.0
Europe (Sweden, England, and Germany)	22	2	9.1
Total	307	42	13.7

* These numbers represent the net totals after subtracting 20 undeliverable questionnaires.

Canadian group seems more plausible than the American one of 18.5%, unless the Outward Bound program is having a marked influence on the number of female trippers. It could be that the attempt to find women canoeists resulted in their being over-represented in the total survey frame. This effect may have been counter-balanced if trip leaders (who are usually men) were also over-represented.

A third area of potential bias is club membership. Only 4 usable names were obtained as a result of an appeal to canoe clubs in British Columbia and Alberta (7 club members from Alberta were personal acquaintances and are included in the first category in Table 4.3). The bulk of names provided by clubs came from the Ontario Wilderness Canoe Association. Of these names, 29 were of persons whose names were not available from other sources. At least 4 of the 29 were not Association members. Twelve of the 29, according to information given by the Association, had only paddled rivers within the Province of Ontario. The Association was founded as a preservationist lobby against hydroelectric power development interests, and likely would attract committed wilderness canoeists. Consequently, the people from the Ontario club may be more strongly committed than others to wilderness values. The Association's contribution included names of canoeists whose access to locations for long wilderness canoe trips might be from eastern Canada exclusively, and who therefore could not be found through sources such as the Yellowknife RCMP and TravelArctic.

The lack of names from clubs in Alberta and British Columbia is somewhat surprising. Clubs in these two provinces do not seem to be so politically motivated as the Ontario club. They are oriented more completely toward promoting activities like weekend trips and skill training programs, so members may focus more of their energy on shorter, more frequent trips closer to home. It may be that most wilderness canoe trippers find their needs are not met by existing clubs in these provinces, and have not felt the need to form their own club. Consequently, their names are not available from this source.

Roughly half of the names on the survey frame derived from "grapevine" sources, which included personal contacts, club members, and some of the respondents and interviewees. It might be suggested that these sources comprise a relatively closed group. It is difficult to accept such a suggestion on the basis of knowledge about wilderness canoeists. It is common for canoe trippers to contact other canoeists for information about routes. When parties meet each other on a river, they often exchange names and other information. Names are sometimes left in cairns (such as the Thelon River cairn built in 1962 by Eric Morse's party) and collected by subsequent travellers looking for future contacts. Consequently, the "grapevine" sources most likely are not significantly biased.

The total of 327 names which comprised the mailing list is reasonably representative of the total population of people who take long wilderness canoe trips, and certainly is an acceptably large proportion of the (unknown) total population of trippers. People whose names would be unavailable through any of the sources which were canvassed are unlikely to constitute the mainstream of the wilderness canoe tripping society.

The most significant biases are likely to be the over-representation of trip leaders and of American female Outward Bound instructors. Unfortunately, this conclusion must remain conjecture.

Response to the Questionnaire Survey

1. Response Rate

As the questionnaires were received, they were numbered serially, dated, and identified by the country of origin. They were received over a period of about four months. Twenty questionnaires were returned undelivered. They are omitted from all the calculations which follow. Of the 150 questionnaires mailed to Canadian addresses, 118 were returned for a response rate of 78.7%. One hundred two (or 75.6%) of the 135 American canoeists returned their questionnaires. The total European response was 10 out of 22 sent or 45.5%. This included 7 of 16 from Sweden, 2 of 3 from England, and 1 of 3 from Germany. Nineteen of the European people did not speak English as a first language, so the low return from Europe was expected. Of a total of 307 deliverable questionnaires, 230 were returned for an overall response rate of 74.9%. This response rate is considered a good, but not exceptional, rate of response for a wilderness recreation survey (see the section in Chapter 2 on Wilderness Recreation Research). The response rate is shown in Table 4.6.

In addition to the return of questionnaires, 44 people (19.2% of the respondents) sent unsolicited letters with additional information, other published information, and requests for information about my Coppermine River trip mentioned in the covering letter. Most of these letters were simply an enthusiastic overflow of ideas from the questionnaire. Fifty-five per cent of the respondents, or 126 people, requested résumés of the study.

2. Non-Response

There were many possible reasons for non-response, clues to which

Table 4.6

Rate of Response to Mail Survey by Country

Country of origin	Number mailed* n	Number returned n	Percentage of return %
Canada	150	118	78.7
U.S.A.	135	102	75.6
Europe (Sweden, England, and Germany)	22	10	45.5
Total	307	230	74.9

* These numbers represent the net totals after subtracting 20 undeliverable questionnaires.

were written in some of the returned questionnaires and letters. Completing the questionnaire was undeniably time-consuming. One respondent, who did not complete the optional section, wrote that she might have done so "had the rest of it taken forty minutes as was stated in the letter". Some people simply may not have wanted to spend the time. This reason should not be over-emphasized, since evidence from survey literature indicates that the relationship between questionnaire length and return is not inverse. Champion and Sear (1969) found that longer questionnaires were returned more frequently than shorter ones in a test of that relationship.

One questionnaire was returned partially completed. This person may have run out of time to complete it, or, more seriously, lost interest because the questions did not touch on his experience. The latter possibility is real in some measure for many people. For example, in answer to the open question of how the respondent might study wilderness canoeing, six would have emphasized interrelationships among the canoe party members, and ten would have preferred to assess how canoe trips changed attitudes toward daily life.

Related to a failure in some cases to measure the personal meaning of tripping experience is the use of the questionnaire as an instrument to assess that experience. Nine respondents answered the optional question about how they might study canoe tripping by saying they would not study it - they would do it instead. An unsolicited letter from a respondent captured the intent of these responses:

> You should benefit more from your contact with nature than by trying to categorize human experience. I felt keenly the total inadequacy of my responses, the more so, the more significant the questions.

Another unsolicited letter revealed the respondent had been tardy in returning the questionnaire because at first he had thought the questions to be unanswerable. However, he changed his mind and photocopied it so that his wife and two daughters each could complete one. That many people responded enthusiastically despite these feelings (for example, the correspondent quoted above concluded: "However, best wishes and good canoeing!", and requested a résumé) indicated that there may have been non-respondents who felt much more strongly that the canoe trip experience was not a suitable topic for inquiry by questionnaire.

Two respondents in enclosed letters stated that they did not understand the purpose of the study. Some non-respondents may have considered, therefore, that to complete the questionnaire would not be worthwhile.

For some respondents, the canoe trip experience may have been insignificant in the context of their daily lives or of other activities in which they engage. For others, it may have been unpleasant. In the rare case, a party member may have been seriously injured or may have died. More commonly, serious frictions that may have developed among members of the canoe party may have contributed to a desire not to remember a trip. (One woman noted that her trip was the reason she was no longer married.) Very bad weather or lack of success in completing the trip could have had the same effect. This is not always the effect, however. Peter Browning (1975) has written a book about a trip on which inter-personal relations were often strained and food was very short, and Carolyn Polese (1977; and personal communication, 1978) has commenced a study on expedition stress after a stressful trip of her own on the Thelon River.

Studies of non-respondents to questionnaires have indicated that they differ in some respects from respondents. Social background characteristics may vary somewhat (Ellis _et_ _al_., 1970), as well as habits and attitudes which would influence the tendency to complete questionnaires (Rosenau, 1963). Franzen and Lazarsfeld (1945, p. 294) have written a summary statement:

> ... mail questionnaires are answered more often by people who, due to their educational and occupational background, more easily express themselves in writing, and by people who are more interested in the topic under discussion.

Some researchers (for example, see Lehman, 1963) have tried to estimate the characteristics of non-respondents by comparing the differences between early and late respondents, and Oppenheim (1966) suggested that late respondents are roughly similar to non-respondents. However, Ellis _et_ _al_. (1970, p. 108) concluded that "late respondents do not provide a suitable basis for estimating the characteristics of non-respondents". There is no systematic evidence to support either position (Burton and Cherry, 1970). In this study, the nature of non-respondents and the reasons for non-response must remain unknown.

Strengths and Limitations of the Questionnaire

Certain aspects of individual personalities were discernible upon reading individual questionnaires, especially in the open-ended questions, but also in the consistency of responses throughout the questionnaire. As discussed earlier in this chapter, encouraging the emergence of this personal quality was an objective for the questionnaire. The personality of each respondent, however, was necessarily lost in the compilation of frequency distributions and cross-tabulations. While this may be a statistical fact of life, it is worth recognizing prior to doing an analysis and interpretation because it stimulates a cautious regard for what statistics can tell us about actual people.

Like the interview, features of the questionnaire may be considered strengths or weaknesses from different points of view. The questionnaire is successful in itemizing aspects of the entire experience. A number of respondents called it "thorough". However, its success with itemization implies that it fails to capture the meaning of the whole experience. One respondent reacted to the question about motivations by commenting that the listed motivations were very specific, while her reasons were

> ... like the old question, "Why do you climb a mountain?" For the sheer joy of doing it, the ups and downs and planning and cold and warm and all of it.

Respondents frequently cautioned that analysis does not lead necessarily to understanding. These warnings probably were inspired by a feeling for a totally involving experience which perhaps cannot be expressed in categories or even in words.

With the attempt to be specific and to use categories, loss of information inevitably occurs. Whether the questions were to be phrased in an open or closed format had been assessed according to how much information either format might lose (see Oppenheim, 1966). Questions were left open when it was felt that closing them would result in losing too much. An example of such a question, with four of the responses, follows:

> Section 4, Question 19: DESCRIBE BRIEFLY YOUR EMOTIONS AT THE MOMENT YOU REACHED YOUR DESTINATION AT THE END OF THE CANOE TRIP:
>
> R: Peaceful, happy, excited, thirsty, "Look what we did!"
>
> R: Satisfaction that two middle-aged men, 55 and 57, with little experience in canoeing (but much in exploration, wilderness travel, and mountaineering) could, within reasonable margins of safety, undertake a long and remote canoe trip without serious incident.
>
> R: Hunger for food (we were starving!). After satiation, peace with myself.
>
> R: Anticlimax on this occasion. Arrived two days early after an easy trip.

These responses covered such a wide range, and appeared to have been given so spontaneously, that closed categories surely would have suppressed meaningful responses and resulted in more information loss than would categorizing the responses after they had been made.

Another question was relatively unsuccessful with the closed format as evidenced by many respondents indicating that their answers depended on certain other conditions. This was Question 18, which asked respondents to indicate a preference for alternative ways of organizing a long canoe trip. While information was lost concerning those conditions, that loss was accepted as necessary in order to obtain the information the question could elicit, which was very difficult to obtain with any format.

In some other questions, the loss of information, when related to what the question was designed to learn, was considered to be minimal. An example of this type is Question 14, which listed five possible roles which the canoe plays on a long wilderness trip and asked the subject to rank them. This question was answered with remarkable consistency, and few respondents indicated experiencing any difficulty with it.

An appealing feature of the questionnaire was that it could be completed at the respondents' leisure, potentially during a receptive mood. Thirty-one people specifically stated their appreciation for being included in the study or stated that they had received some benefit from having completed the questionnaire, such as the pleasure of memories or learning more about themselves. A number of respondents offered further names of canoeists, indicating they thought that their acquaintances also would be receptive to completing questionnaires. Finally, the large number of unsolicited letters and additional comments in the booklets indicated that the questionnaire was stimulating and enjoyable for many people.

CHAPTER FIVE

DESCRIPTION OF THE RESPONSES TO THE QUESTIONNAIRE SURVEY

Introduction

In this chapter, the frequencies of specific responses to questionnaire items are presented. In most cases, the categories of response are tabulated in their original forms, while in cases where the variety of response was great, the categories have been collapsed for ease of presentation and analysis. (For example, occupations were collapsed from twenty categories into four.)

The chapter begins with a discussion of the profile characteristics of respondents. Aspects of their canoe tripping experience are dealt with next, and are augmented with a brief description of respondents' backgrounds in canoeing and camping. Some features of the recalled trip are presented, including the year it occurred, its duration, its location, and the presence of spouse and/or children on the trip. The chapter continues by following the three major phases of the canoe trip - planning, on-site experience, and recall - which were outlined in the questionnaire. Lastly, responses to the questions on motivations are described. At the conclusion of each section, two canoeists are described according to their responses to the questionnaire. This is done in order to illustrate how the discrete variables treated independently in this chapter are most usefully understood as component characteristics of an integrated and real person. The canoe tripper is at one and the same time an individual and a member of a group of recreationists displaying consistencies in characteristics, preferences, attitudes, and activities.

Characteristics of the Respondents

A three-part classification was used to indicate the country of origin of respondents. The three classes were Canada, U.S.A., and Europe, which included Sweden, England, and Germany. Of the 230 respondents, 118 were Canadians, 102 were Americans, and 10 lived in the European countries. They comprised 51.3%, 44.3%, and 4.3% of all respondents, respectively. Because the number of Europeans was so small, they were omitted from the analysis of certain characteristics of respondents according to country of origin. No significant differences were found between Canadian and American respondents in some characteristics, including age, marital status, and education. However, other characteristics varied according to country of origin. Since summary statistics would obscure these variations, these characteristics are presented according to country of origin. They are sex, occupation, parenthood, and club membership.

There was some indication that income earned in the household of the respondent at the time of the recalled trip varied between Canadians and Americans. However, income figures from different years and in different countries are difficult to compare, due to a variety of factors such as wage rates, cost of living, inflation rates, and differing exchange rates. Consequently, the findings about income likely would be misleading, and are not presented here.

Age is one of the variables which was not associated with country of origin. The questionnaire asked for current age, rather than age at the time of the recalled trip, which caused the average age of respondents to be raised unnecessarily. In addition, younger people had the possibility only of remembering recent trips, whereas older people could remember trips they had taken many years ago when they were considerably younger. It is possible that, had figures been obtained for age at the time of the trip, age might have been correlated more reliably with other variables such as motivations. Table 5.1 documents the reported ages of respondents. At the time of filling out the questionnaire, no respondents were 14 years or younger, and very few were 15 to 19 years, or older than 64 years. One-third of respondents were aged 25 to 34 years, and almost as many were 35 to 44 years. Thus, the most common ages for respondents were between 25 and 44 years (61.8%).

Table 5.1

Age of Respondents

Age	Percentage
15 - 19	3.0
20 - 24	8.8
25 - 34	33.3
35 - 44	28.5
45 - 54	18.4
55 - 64	7.0
65 or older	0.9
Total	(228) 100.0%

Number of missing observations = 2

Of 226 respondents who indicated their marital status, 134 (59.3%) were married. The smaller proportion of respondents (40.7%)

were unmarried.

The level of education attained by respondents is depicted in Table 5.2. By far the greatest proportion of respondents (75.7%) held university degrees, and substantially more than half of these had graduate degrees. The high proportion of university educated people is augmented by some of the 34 canoeists (15.0%) who fit into the next highest category of having completed high school, and who are currently university students. There were very small numbers of respondents who had elementary school only, or who had technical school training or were licensed tradespeople.

Table 5.2

Highest Level of Education Completed by Respondents

Level of education	Percentage
Elementary school	0.9
High school	15.0
Technical school	7.0
Licensed trade	1.3
Undergraduate degree	31.7
Graduate degree	44.0
Total	(227) 100.0%

Number of missing observations = 3

The sex of respondents was associated with country of origin. Table 5.3 shows for each country the proportion of male and female respondents. Women comprised 17.9% of the total number. The proportion

Table 5.3

Sex by Country of Origin

Sex	Country of origin* Canada	U.S.A.	Total	
Male	89.7	73.5	(179)	82.1
Female	10.3	26.5	(39)	17.9
Total	(116) 100.0%	(102) 100.0%	(218)	100.0%

Corrected chi square = 8.54 1 Degree of freedom
p<.01
Number of missing observations = 2

* The European subgroup of 10 persons has been omitted from this table.

of Canadian women (10.3%) was well below this average, while the proportion of American women (26.5%) was above it. Almost the same proportion of Canadian women returned their questionnaires as were surveyed (10.0%, see Table 4.5). Women formed a higher proportion of the total number of American respondents than they did of the total number of Americans in the survey frame (26.5% compared to 18.5%). Thus, not only was the survey group biased toward American women as discussed in Chapter Four, but the characteristics of respondents were even more biased in that direction, and women are probably over-represented in the total number of respondents.

Occupation was another characteristic associated with country of origin, as shown in Table 5.4. Professionals comprised the largest proportion of respondents (57.2%). The proportion of American professionals was lower than that for Canadians. People who earned their

Table 5.4

Occupation by Country of Origin

Occupation	Country of origin*		Total	
	Canada	U.S.A.		
Professional	67.2	45.5	(123)	57.2
Other occupations	21.6	25.3	(50)	23.3
Outdoor recreation - Outward Bound	4.3	21.2	(26)	12.1
Student	6.9	8.1	(16)	7.4
Total	(116) 100.0%	(99) 100.0%	(215)	100.0%

Chi square = 17.46 3 Degrees of freedom $p<.001$
Number of missing observations = 5

* The European subgroup of 10 persons has been omitted from this table.

living through involvement in outdoor recreation, outdoor education, or Outward Bound formed more than one-tenth of the total group of respondents. The proportion was markedly higher for Americans than for Canadians (21.2% compared to 4.3%). It is very likely that more opportunities exist in the U.S.A. for outdoor recreation jobs than in Canada, due to the more advanced development of outdoor activities there, and that the people who are attracted to long canoe trips and other wilderness activities seize the opportunities to have jobs related to their recreational pursuits. This may be a partial explanation for the large number of Americans in this category which complements the explanation of bias in the survey frame presented in Chapter Four.

Parenthood is a characteristic which negatively influences the likelihood that a person will be able to take a long wilderness canoe trip. In Table 5.5 it is evident that only slightly over one-third of trippers had children. Canadians were more likely than Americans to have children. A tentative explanation for this observation is that Canadians are closer (in most cases) to the northern wilderness. Therefore, Canadians who are parents may find that taking their children on canoe trips is less onerous and expensive a task than if they lived as far away as most Americans. However, there is no firm evidence to substantiate this proposition.

Table 5.5

Parenthood by Country of Origin

Parenthood	Country of origin*		Total
	Canada	U.S.A.	
No children	54.3	71.7	(134) 62.3
Children	45.7	28.3	(81) 37.7
Total	(116) 100.0%	(99) 100.0%	(215) 100.0%

Corrected chi square = 7.65 1 Degree of freedom
p<.01
Number of missing observations = 5

* The European subgroup of 10 persons has been omitted from this table.

The frequency of club membership varied between countries. Table 5.6 indicates that, while a minority of all respondents (33.5%) were

Table 5.6

Club Membership by Country of Origin

Club Membership	Country of origin*		Total
	Canada	U.S.A.	
Non-member	57.4	77.0	(143) 66.5
Member	42.6	23.0	(72) 33.5
Total	(115) 100.0%	(100) 100.0%	(215) 100.0%

Corrected chi square = 10.13   1 Degree of freedom
p<.01
Number of missing observations = 5

* The European subgroup of 10 persons has been omitted from this table.

members of outdoor clubs, the American minority was the smaller at 23.0%. The high Canadian proportion (42.6%) is likely the result of the contributions of names for the survey by the Ontario Wilderness Canoe Association, discussed in Chapter Four.

In summary, some characteristics such as age, marital status, and level of education showed no significant differences between respondents from Canada and the U.S.A. The distribution of some other characteristics - namely, sex, occupation, parenthood, and club affiliation - varied according to the country of origin of the respondent. These variations, particularly in the case of sex and club affiliation, probably indicate the presence of bias in the survey frame which almost certainly would influence the results of the survey. However, since the demographic characteristics are closely interrelated with one another, these variations may also reflect a complex relationship between aspects of an individual's life-style which might well be different between Canada and the U.S.A.

The two respondents whose questionnaires were chosen for review in this chapter are given the pseudonyms, "Doug" and "Joanne". Doug is a Canadian man who is between twenty-five and thirty-four years old. Although he was married at the time of his recalled trip, his wife did not accompany him on the trip. He had no dependent children at that time. He is an electronic engineer by profession, possessing a post-graduate degree. He is not an actively participating club member. Joanne is a woman from the U.S.A. who fits into the same age category as Doug. She is unmarried and childless. Joanne is an Outward Bound Instructor with a university undergraduate degree. She, also, is not an active club member.

Canoe Tripping Experience

Information about the tripping experience of respondents was derived from the checklist of conditions met by their trips as well as a list of long wilderness canoe trips they had taken. A question on the degree to which they were committed to canoe tripping, one on the differences between short and long trips, and another on how they happened to take their first trip, provided further information. Some specific aspects of tripping experience, such as having taken a trip solo or in a kayak, and having had children and/or spouse on a trip, were also recorded.

The checklist of conditions which established minimum requirements for a "wilderness" trip was as follows:

1. The trip was longer than one week in duration.
2. The trip was conducted without the services of a professional guide.
3. Members of the canoe party participated voluntarily.
4. The trip was conducted on a river or lake system without road, train, barge, or four-wheel drive access for at least one week.
5. Travel along the river or lake system in question was unsupplemented by motors for at least one week.

Only 18 people, or 7.8% of all respondents, had not taken trips which met all five conditions. Nine of the eighteen had not met the fourth condition.

In their lists of trips, respondents did not always record only those trips which met the previously specified conditions. A count was made of the number of trips respondents had taken which "qualified" as long wilderness canoe trips. To qualify, a trip had to have been at least seven days in duration, and to have taken place in a location which could be considered both northern and wilderness. (This excluded, for example, the Red Deer River in Alberta and the California coastline, neither of which was considered to be northern or wilderness for the purposes of this study.) In addition, trips conducted as a part of one's work were excluded. These conditions for qualifying were not stringent, but stricter conditions would have required more complete information, including point of access to the river in question, existence of hunting and fishing lodges en route, presence or absence of road access, and so on. In short, the conditions could be said to have been strict, but not highly restrictive. They also had the advantage of being easy to apply in a consistent manner.

Table 5.7 shows the number of qualifying trips canoeists had taken. The largest proportion of people, 20.4% had taken only one such trip; but the proportions of those who had taken two and three trips were very close. Only 4.4%* of the respondents had not taken any trips which qualified, and almost one-tenth had taken eight trips or more. In sum, 75.2% of the canoeists were relatively experienced, having taken more than one such trip.

Table 5.7

Number of Qualifying Trips Taken by Respondents

Number of trips	Percentage
0	4.4
1	20.4
2	19.6
3	18.2
4	11.6
5	6.7
6	5.3
7	4.0
8 or more	9.8
Total	(225) 100.0%

Number of missing observations = 5

---

* The discrepancy between this figure and that of 7.8% of respondents who did not meet all five conditions (page 94) is due to lack of information specified in Condition Four, and possibly due to the difference between "longer than one week in duration" (Condition One) and "at least seven days" (as opposed to eight).

The trips varied considerably in duration. Table 5.8 shows that 40.9% of respondents had taken at least one trip that had lasted more than four weeks. Another 45.6% had taken at least one trip lasting three or four weeks. The most common duration for the longest trips canoeists had taken was four weeks, with three-week trips and those longer than five weeks almost as common.

Table 5.8

Duration of Longest Trip Taken by Respondents

Duration in days	Percentage
7 or fewer	2.6
8 - 14	10.9
15 - 21	21.7
22 - 28	23.9
29 - 35	18.3
More than 35	22.6
Total	(230) 100.0%

Number of missing observations = 0

A scale was constructed to measure the relative remoteness of locations for canoe trips. It consists of four groups of locations which are (starting with the most remote): Barrens, remote northern forest, semi-remote northern forest, and well-used locations. The specific rivers included in each category are listed in Appendix 10. The scale was based on personal experience and information, as well as advice from a number of canoeists who had paddled the rivers in question or who knew of others who had. It is not strictly a measure of remoteness, but includes some very subjective differences between Barrens canoe trips and those taken in remote, forested northern locations, as well as differences between areas which are very popular and those less well used. A predominant feeling of visitors to the Barrens was described well by one interview subject who said, "There's nothing to put your back up against". The feeling of almost limitless expanse, and especially a lack of sheltering and fuel-providing trees, adds to the subjective impression of remoteness which, for most people, distinguishes the Barrens from forested locations. In addition, the expectation of meeting more than a few other persons on a wilderness trip must be considered to be different in kind (as well as degree) from the expectation of meeting a few others or no-one else for several weeks. For example, some canoeists feel it is safer to take a solo trip on a well travelled river than on a "more remote" one.

The most remote locations of respondents' trips are presented in Table 5.9. Almost sixty percent of the respondents had taken their most remote trip in a Barrens location. The remainder were split almost evenly between the other three categories. The largest proportion of the group, 72.2%, could be said to have taken trips in the "more remote" locations of Barrens and remote northern forest. A minority, then, had taken trips in "less remote" locations. The number of different types of locations in which respondents had taken trips was recorded. Five respondents had taken trips only in locations which could not be classified. About one-third (32.5%) had taken trips in only one type of wilderness location. Most of the canoeists (65.4%) had taken long canoe trips in more than one type of wilderness location.

Table 5.9

Most Remote Trip Location Reported by Respondents

Location	Percentage
Barrens	59.6
Remote northern forest	12.6
Semi-remote northern forest	13.9
Well-used location	13.9
Total	(223) 100.0%

Number of missing observations = 7

The total number of conditions met, the number of qualifying trips taken, the duration of the longest trips, the most remote locations for trips, and the number of locations for trips all indicate that most of the respondents to the questionnaire are fairly experienced wilderness canoe trippers.

Canoe tripping is a recreational activity which can consume much time in addition to the time spent on the actual trip, due to the demands of planning and preparation. A relative measure of the degree to which individuals are committed to canoe tripping is useful because it indicates, to a certain extent, the amount of time individuals are prepared to devote to it. Table 5.10 shows that only 13.6% of respondents thought their trip(s) had been a one-time occurrence or that other things could satisfy them as well. Somewhat more committed to tripping, in wishes if not in action, were 23.3% of respondents, who reported that

Table 5.10

Relative Commitment of Respondents to Canoe Tripping

Relative Commitment		Percentage
My canoe trip was a once-in-a-lifetime opportunity		1.8
Other things I could do are just as satisfying		11.8
If I had more money, I'd take more trips		2.2
If I had no other commitments I'd take more trips		21.1
I plan to take trips regularly at least every few years		28.1
Trips are a major part of my life nearly every summer		14.9
Trips are a major part of my life throughout the year		12.3
More than one response		7.9
Total	(228)	100.0%

Number of missing observations = 2

they would take more trips if they had more money (this was a problem for very few*) or if they were not otherwise committed. The largest proportion (28.1%) planned to take trips regularly every few years. Almost as large a proportion (27.2%) were very committed trippers for whom long canoe trips were a major part of their lives.

---

* The low proportion (2.2%) of those who responded that they would take trips more frequently if they had the money is an anomaly which indicates that the statement concerning money did not belong in the scale of relative commitment to tripping for this group of people.

Probably, the role that long canoe trips play in most of the respondents' lives could not be filled by shorter trips. Of 183 people who answered the "optional" question about the differences between short and long trips, only 17 people, or 9.3%, reported that the satisfactions they derived from short trips were the same as those on long trips. Some of the most important differences mentioned were that longer trips were more significant, producing changes in their participants; that they were more adventuresome; and that they tended to be general in purpose, rather than have a specific purpose like whitewater practice, which is more characteristic of shorter trips.

One hundred ninety-eight people, or 86.1% of respondents, answered the "optional" question about how it happened that they had taken their first canoe trip. Table 5.11 provides a breakdown of their responses. For the largest number (22.7%) it had been part of a natural progression which had begun with shorter, less remote trips. A similar proportion (21.2%) had been invited to go on their first trips by friends or acquaintances, or asked to substitute for canoeists who had planned to go but had withdrawn as the deadline had approached. Another 13.1% of respondents had become involved in a group of friends who had conceived and planned a trip. Twenty-two of the canoeists (11.1%) had begun their tripping experience through camp or work programmes. More than one reason was given by 14.6% of the respondents, and the remainder expressed a wide variety of less common reasons.

For 59.6% of respondents (137 people) there had been no particular sequence to the trips which they had undertaken. For those for whom there had been a sequence, the most commonly expressed logic behind that

Table 5.11

Reasons for Taking the First Long Canoe Trip

Reason	Percentage
Natural progression from shorter, less remote trips	22.7
Was invited to complete a party or to substitute for no-show	21.2
Part of a group of friends planning a trip	13.1
Camp or work-related trip	11.1
More than one reason	14.6
Other reason	17.2
Total	(198) 100.0%

Number of missing observations = 32

sequence was that as their experience and/or skill had developed, they had been able to seek more challenging rivers and locations. This was true for only 39 people. The next most commonly expressed reason for a sequence, which was important to 21 people, was that each trip had to take place in a new location.* Other explanations of a sequence were expressed by small minorities of respondents.

Two particular aspects of a trip which influence the experience of a trip are reported below. These are whether the trip has been done solo and if a kayak has been used rather than an open canoe. Only 13 people had taken solo trips. Almost every aspect of such a trip would be different from one taken with one or more companions. Some important differences would be the lack of moral and physical support from other people (as well as the lack of conflict with them), and the relatively greater risk associated with being alone. The open canoe (or open canoe with splash cover) had been used by all but five respondents, who had paddled kayak. Since kayaks have very limited load capacity, paddlers would be restricted to shorter trips (up to ten days) or would have to depend on support from canoes or caches. Further, although kayaks can be paddled safely through larger waves and shallower water than open canoes, they are not portaged as readily, and so would not be practical boats for some routes.

---

* A sequence depending on a new location for each trip is important to many canoeists, as will be indicated in the section entitled, "Planning the Trip". However, it is probable that many of the respondents did not consider looking for new locations to be a "special sequence" as stated in the questionnaire.

Related to respondents' experience with wilderness canoe tripping is their experience with camping and canoeing in general. The first section of the questionnaire assessed the outdoor recreation experience of respondents by asking for the number of years of experience with camping and canoeing, finding out the different styles of camping each person had done, and asking how they had learned to canoe.

Table 5.12 tabulates the camping and canoeing experience of respondents. The largest proportion of respondents for both camping and canoeing experience (40.4% and 32.6%, respectively) was in a fairly experienced category - 11 to 20 years of experience; but it can be seen that the proportion of people with this degree of camping experience is higher than that of people with the same amount of canoeing experience. This is also true for the "most experienced" category of over 20 years.

Table 5.12

Camping and Canoeing Experience of Respondents

Years of experience	Camping experience	Canoeing experience
0 - 5	6.5	21.7
6 - 10	30.0	29.6
11 - 20	40.4	32.6
more than 20	23.0	16.1
Total	(230) 100.0%	(230) 100.0%

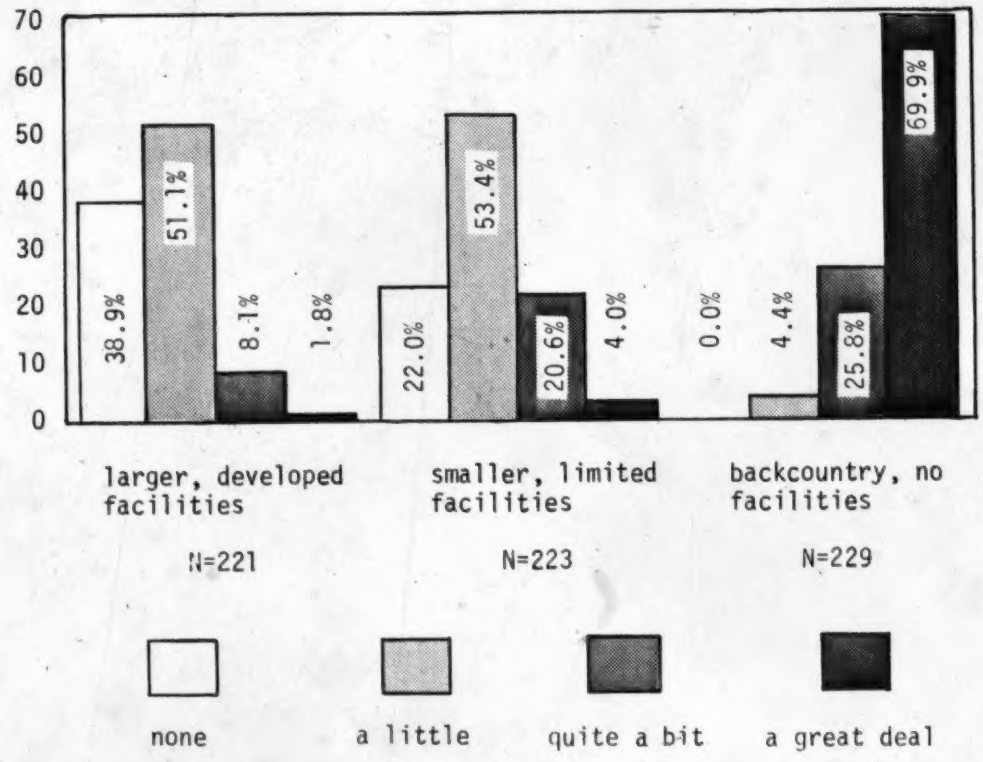
Number of missing observations = 0

Alternatively, a higher proportion of those reporting canoeing experience were inexperienced (21.7% for 0 to 5 years) than of those reporting the same amount of camping experience (6.5%).

In indicating how much camping they had done (Figure 5.1), a much larger proportion (69.9%) of those who had camped in primitive areas reported having done so "a great deal" than did those who had camped where there were limited facilities (4.0%) or in developed campgrounds (1.8%). About half of the respondents had camped "a little" in the smaller campgrounds (53.4%) and also in the larger developed ones (51.1%), compared to only 4.4% who had camped "a little" in the primitive areas. Some respondents mentioned that they preferred to camp in undeveloped areas but had to use other types of areas in order to take advantage of canoeing opportunities for shorter trips. Almost forty per cent of respondents recorded never having camped in large, developed facilities, which was a much larger proportion than had never camped in smaller

Figure 5.1

Experience with Different Styles of Camping



campgrounds with limited facilities (22.0%). Of course, none of the respondents reported a lack of experience with backcountry camping.

The skills involved in canoeing can be learned in a number of ways, which are outlined in Table 5.13. The majority of people had learned some or all of their canoeing skills from experienced friends, or they had taught themselves (62.2% and 54.3%, respectively). More than one-fourth of respondents had learned with their families, and somewhat fewer (21.7%) had learned from a variety of other sources (such as a guide). About the same proportions (13.5% and 12.6%, respectively) had learned through lessons and with a club.

Table 5.13

How Canoe Skills Were Learned

Source of learning	Percentage*
Experienced friends	62.2
Self	54.3
Family	26.5
Other (inexperienced friends, camp, etc.)	21.7
Lessons	13.5
Club	12.6

* Each percentage is based on a total of 230 respondents.

The relatively large numbers of people who reported having learned by informal means is somewhat consistent with the observation that the majority of trippers do not belong to organized clubs, and also with their tendency to camp in the less developed and organized campgrounds. That is, the organization of camping and canoeing experiences tends to be dependent upon the individual and takes place on a small scale (eg. the family group instead of the club, the personally chosen camping spot as opposed to the predetermined campsite in a campground).

Both of the respondents mentioned earlier, Doug and Joanne, had taken trips which met all five conditions. All of Doug's six listed trips qualified as long wilderness canoe trips, and had taken place in Barrens and in remote northern forest locations. His longest trip lasted sixty days. He has taken a trip every year since 1971, which is reflected in his response that "long canoe trips are a major part of [his] life nearly every summer". He wrote that his first trip had been conceived with a group of people "with common interests in adventure eventually distilled out of the primordial soup", and that trips since the first have had no particular sequence to them. For him, what makes short and long trips different is that the sense of timelessness cannot be achieved on a shorter trip. Doug reported that he had camped for about twenty years, and canoed about ten years. He had not camped at all in larger, developed campgrounds, only a little in medium to smaller campgrounds, and a great deal in the backcountry. His canoeing skills had been learned on his own and with experienced friends.

Joanne was less experienced. Only one of her three listed trips had met all five conditions for a wilderness canoe trip, the other two being organized by camps she had attended or at which she had been a counsellor. However, she had about eighteen years of experience as a canoeist and camper, exclusively in the backcountry, through camp programmes. Her long wilderness canoe trip lasted twenty-five days, and took place in a location in the semi-remote northern forest. Joanne's commitment to long canoe trips is that she plans to take them on a regular basis, every few years. She had been invited to do her first long camp trip by her camp, and since then, she has progressed "from lesser to greater experience and independence" in organizing trips. Short trips are different from long trips for her not because it takes her a long time to develop the life-style (frame of mind) of canoe tripping, but because she wishes to prolong that life-style.

Some Features of the Recalled Trip

Respondents were asked to focus their memories on a particular trip while answering the questionnaire. This trip was to be the one which had met the most of the conditions on the front page (see page 94), and could be either the most recent trip or the one which had created the most pleasant memories. Of the 203 respondents for whom this information was available, 65.0% recalled their most recent trip, while the others had taken at least one trip since the one which they recalled for the questionnaire. Table 5.14 shows the years during which recalled trips had been taken. The largest proportion of respondents (44.8%) remembered trips which had taken place from 1974 to 1976. Trips taken in 1977 were remembered by 30.8% of the canoeists. Thirteen people (6.5%) were able to recall in detail trips taken before 1970. The earliest trip which was recalled had occurred in 1955. For 159 respondents (77.6% of the 205 respondents for whom this could be determined), the recalled trip was either the longest in duration of any they had taken, or was equally as long as the longest trips they had taken.

More than half the recalled trips had taken place in the Barrens

Table 5.14

Year of Recalled Trip

Year	Percentage
55 - 69	6.5
70 - 73	17.9
74 - 76	44.8
1977	30.8
Total	(201) 100.0%

Number of missing observations = 29

(120 of 208 cases). A rather large proportion, 16.8%, had taken place in well-used locations. About the same proportion (11.1% and 14.4%, respectively) of recalled trips had been in remote and semi-remote northern forest locations. Table 5.15 shows that, on average, 91.6% of canoeists recalled trips which had taken place in the most remote location in which they had paddled. Paddlers whose most remote trip had taken place in the Barrens were more likely than the other trippers to recall their most remote trip.

Whether one's spouse and/or children are along on a trip may be associated with such important trip features as where it takes place, how it is conducted, why one wants to go, and what benefits one expects to achieve. It may also influence one's commitment to canoe tripping. Only 20 canoeists were parents who had taken their children with them on their recalled trips (24.4% of respondents who were parents). Of the 134 respondents who had been married at the time of their recalled trips, only 32.1% had been accompanied on the trips by their spouses. Women had

Table 5.15

Recalled Location by Most Remote Location

Recalled location	Most remote location*			Total
	Barrens	Remote northern forest	Semi-remote northern forest	
Recalled most remote location	95.2	80.0	85.2	(163) 91.6
Recalled less remote location	4.8	20.0	14.8	(15) 8.4
Total	(126) 100.0%	(25) 100.0%	(27) 100.0%	(178) 100.0%

Chi square = 7.95 2 Degrees of freedom p<.02
Number of missing observations = 22

* 30 respondents whose most remote location was a "well-used" location were omitted from this table since it was not possible for them to recall a less remote location within this classification system.

travelled with their husbands far more frequently than men had travelled with their wives, as shown in Table 5.16.

Doug remembered a trip he had taken in 1972 in a Barrens location. It was not his longest trip, nor was it his most recent. His wife had not accompanied him on this trip. Joanne's trip had taken place in 1976 on a river in the semi-remote northern forest. She had taken one camp trip which was longer by five days but shorter by 200 miles. She always had travelled with other women, whereas Doug usually had travelled with other men.

Table 5.16

Tripping with One's Spouse by Sex

Presence of spouse	Sex		Total*
	Male	Female	
Spouse not on trip	78.0	24.0	(91) 67.9
Spouse on trip	22.0	76.0	(43) 32.1
Total	(109) 100.0%	(25) 100.0%	(134) 100.0%

Chi square = 27.20 1 Degree of freedom p<.001
Number of missing observations = 0

* Total based on the number of respondents who reported being married.

Planning the Trip

People's attitudes about planning a long wilderness canoe trip should give some indication of what they expect their trips to be like. Table 5.17 displays canoeists' responses to a variety of statements about the role of planning. There was general agreement that planning enables flexibility and resourcefulness during a trip, and that it promotes security and enhances the feeling of self-reliance. Agreement was somewhat less pronounced with the statement, "Planning is almost as exciting as the trip itself", and only slightly over half of the respondents thought that "Planning is the same thing as safety". There was very pronounced disagreement with the statement, "The purpose of planning is to remove every element of the unknown". Fewer people were neutral about this last category than were neutral about any other. These results suggest that canoeists feel that planning enables them to be independent and secure, without removing adventurous aspects of the trip which arise from

Table 5.17

Attitudes Concerning the Role of Planning

Role of planning*	Strongly disagree	Mildly disagree	Neutral	Mildly agree	Strongly agree	Disagree	Agree	Total
Enable flexibility	1.3	4.8	14.5	41.9	37.4	6.2	79.3	(227) 100.0%
Enable resourcefulness	3.5	2.6	14.9	42.5	36.4	6.1	78.9	(228) 100.0%
Promote security	1.8	6.6	13.2	35.2	43.2	8.4	78.4	(227) 100.0%
Enhance feeling of self-reliance	1.8	2.2	18.2	42.2	35.6	4.0	77.8	(225) 100.0%
Almost as exciting as the trip itself	7.4	11.8	17.0	38.0	25.8	19.2	63.8	(229) 100.0%
The same thing as safety	7.0	18.8	17.9	32.8	23.6	26.5	56.3	(229) 100.0%
Remove every element of the unknown	45.8	27.6	10.2	12.4	4.0	73.3	16.4	(225) 100.0%

* "Planning is a necessary bother" was omitted from analysis because it was a double-barrelled statement, and many respondents indicated having difficulty with it.

elements of danger and of the unknown.

Another indication of what people expect and hope their trips will be like is provided by the conditions they require of their selected locations, as well as their choice of companions and their allotment of time for the distance and difficulties to be encountered. Respondents were asked to specify which conditions must be met before they would consider going on a long canoe trip.

Table 5.18 indicates that there were two conditions about which considerably more than half of the respondents were concerned: the expectation of seeing other people, and the pacing of the trip. Regarding the expectation of meeting others, 54.5% required that their trip nourish the expectation of meeting no other people, while 29.8% wanted to meet a few others. Only 15.8% of respondents were unconcerned about whether other people would be present. Most of the canoeists (58.6%) required that there be "enough time available to schedule a number of days off, here and there"; only 5.6% chose the alternative of pushing hard throughout the trip.

Respondents were almost evenly divided between concern and unconcern for the conditions of beautiful scenery, rapids, and the location for the trip being a new one. All of those who were concerned about the location required a new location rather than a familiar one; and all but one of those concerned about rapids required that the location have some difficult rapids.

The conditions about which most people were not concerned were the presence of insects, firewood, large lakes and portages en route, and evidence of human history. For these particular conditions, there was not much difference in the proportions of people who chose either the

Table 5.18

Minimum Conditions Required for Trips

Minimum condition	Condition not required	Negative choice required eg. "no rapids en route"	Positive choice required eg. "rapids en route"	Total
Presence of other people	15.8	54.5	29.8*	(215) 100.0%
Extra time in schedule	35.8	5.6	58.6	(215) 100.0%
New location	45.6	0.0	54.4	(215) 100.0%
Rapids en route	47.9	0.0	51.6	(215) 100.0%
Beautiful scenery**	50.2	-	49.8	(215) 100.0%
Be with good friends**	59.1	-	40.9	(215) 100.0%
Self-reliance for emergency rescue	60.0	7.9	32.0	(215) 100.0%
Presence of human history	73.0	13.0	14.0	(215) 100.0%
Portages en route	85.1	3.7	11.1	(215) 100.0%
Large lakes en route	90.7	4.2	5.1	(215) 100.0%
Plentiful firewood	91.2	1.4	7.4	(215) 100.0%
Few insects**	98.1	-	1.9	(215) 100.0%

Number of missing observations = 15

* No respondent chose the alternative stating, "Likely, we will meet a number of people along the way". The 29.8% of respondents reported above chose the alternative stating, "Likely, there will be few people encountered along the way".

** A negative alternative (being unrealistic) was not offered.

positive or negative alternative. These conditions were the only ones for which this was true. (For example, 4.2% of respondents recorded that they would not choose a route that included large lakes, while 5.1% recorded that they wanted to include lakes in any route they would choose.) Sixty per cent of respondents were unconcerned about the condition of being self-reliant for emergency rescue; of those who were concerned, most required that the canoe party be dependent upon itself, rather than others, for rescue (32.0% compared to 7.9%). Almost sixty per cent of respondents did not require that they be accompanied by good friends on a long trip.

For many canoe trippers, the number of canoes (and therefore, people) in one's party is a critical element in the planning of a trip; for some, a specific number may be construed as a minimum requirement for the trip. The size of a canoe party is often a compromise between reasons which suggest a higher number of people and those which suggest a lower number. The reasons that the canoeists gave for having a higher number of canoes were grouped into three categories: safety (eg. in case of a lost canoe, going for help, etc.); logistics (aircraft costs, sharing equipment, etc.); and group dynamics (more varied social life, defusing tensions between individuals, etc.). Reasons given for having a lower number of canoes were also grouped into three categories. Logistics and group dynamics were two of the categories; but in this case, "logistics" meant being able to find tent sites, not having so many delays, and so on; while "group dynamics" meant that stronger bonds could be developed with a smaller group, the formation of subgroups (factions) was avoided, and there was not so great a likelihood that expedition members would back out. No-one said that safety was an important reason for having fewer canoes, but some respondents gave reasons that had to do with maintaining a wilderness experience (eg. low environmental impact, less noise to scare wildlife, and so on).

Tables 5.19a and 5.19b show the proportions of respondents who mentioned specific reasons. By far the most commonly mentioned reasons

Table 5.19
Reasons for the Preferred Size for a Canoe Party

Table 5.19a

Reasons for a Higher Number of Canoes in the Party

	Safety	Logistics	Group dynamics
Not mentioned	28.5	93.9	84.6
Mentioned	71.5	6.1	15.4
Total	(228) 100.0%	(228) 100.0%	(228) 100.0%

Number of missing observations = 2

Table 5.19b

Reasons for a Lower Number of Canoes in the Party

	Maintain wilderness experience	Logistics	Group dynamics
Not mentioned	89.0	55.7	78.1
Mentioned	11.0	44.3	21.9
Total	(228) 100.0%	(228) 100.0%	(228) 100.0%

Number of missing observations = 2

for a higher number of canoes were safety oriented (mentioned by 71.5% of respondents). No single group of reasons stood out so distinctly for having a lower number of canoes, but logistical reasons were mentioned twice as frequently as those having to do with group dynamics and four times as often as those related to maintaining a wilderness experience. Logistical reasons were mentioned far more often as reasons for a lower number than for a higher number (44.3% compared to 6.1%, respectively), and reasons having to do with the dynamics of the group were mentioned somewhat more often in favour of the smaller group than the larger (21.9% compared to 15.4%, respectively).

The great popularity of safety reasons is reflected in the most commonly preferred size for a wilderness canoe group - three canoes, or six people - which was preferred by 115 respondents. The next most popular size was a two-canoe group, preferred by 76 people. Twenty-five people preferred to travel using only one canoe (with or without another person). Only 13 of the canoeists liked to travel in groups larger than three canoes. The largest group mentioned was six canoes.

The size of the canoe party is, for most respondents, an act of planning that is mainly directed toward safety. Yet it is not so evident that planning in general is directed mainly toward safety. Rather, many respondents are relatively unconcerned about potentially hazardous conditions for their trips, such as the presence of rapids and the emergency rescue situation. Moreover, those who are concerned choose the more hazardous alternative. Finally, most people expect not to see any others while on their trips. It would appear that some hazards are anticipated to occur, and that planning (such as having three canoes on the trip) enables trip participants to cope with those which do arise while they are on a trip.

Doug was in strong agreement with all the statements about planning except one: he mildly agreed that "planning is almost as exciting as the trip itself". He was very demanding about the conditions for his trips, specifying seven conditions, which were:

> I will be with a group of my very good friends.
>
> There are long or difficult portages along the way.
>
> The canoe party is dependent upon itself for emergency rescue.
>
> The area is nearly absent of evidence of human history.
>
> The river has some difficult rapids.
>
> There is enough time available to schedule a number of days off, here and there.
>
> Likely, the area is completely absent of any other people.

The condition regarding portages seems extreme: yet all of Doug's trips, save one, were trips which were physically arduous. He preferred to travel with two canoes for logistical reasons - ease of co-ordination between crews, and easy allocation of jobs.

Joanne preferred three-canoe parties for added safety in white water. She strongly disagreed that "the purpose of planning is to remove every element of the unknown", and strongly agreed that planning permits flexibility during the trip. She was neutral regarding promotion of security as the role of planning. She mildly agreed with the other four statements about planning. She was equally as demanding as Doug. She specified the following minimum conditions for her trips:

> I will be with a group of my very good friends. [She crossed out "very good" and substituted "compatible, able to communicate".]

The scenery is expected to be beautiful.

There are long or difficult portages along the way. [Above the words "long or difficult" she wrote "some".]

The location is new and different.

The river has some difficult rapids.

There is enough time available to schedule a number of days off, here and there.

Likely, the area is completely absent of any other people.

While seven conditions may seem to be a large number to be met, it is evident from both Doug's and Joanne's lists that such a number is certainly realistic and is not difficult to attain for a long wilderness canoe trip.

The Trip in Progress

During a long wilderness canoe trip, events, activities, and the physical, psychological, and social environments shape the experience of each individual. In the background of this experience is the role perceived for the canoe (apart from the simple role of transportation). The perceived role likely is an indicator of the nature of the experience which is sought. Respondents were asked to rank five proposed roles for the canoe from most to least important. For ease of analysis, these ranks were adjusted for each role statement by using a scoring technique. The percentage of respondents assigning first rank to the statement was multiplied by five; the percentage of respondents giving second rank to the statement was multiplied by four; and so on. The scores for each statement were then summed to produce a composite rank score.

The results of this scoring procedure are displayed in Table 5.20.

Table 5.20

Ranking the Roles of the Canoe

Role Statement	Rank					Total	Composite rank score
	1	2	3	4	5		
Be part of wilderness	71.7	18.8	8.1	0.9	0.4	(225) 100.0%	460.2
Be independent	20.2	44.0	25.7	8.3	1.8	(218) 100.0%	372.5
Get from A to B	14.2	21.9	32.4	21.9	9.6	(219) 100.0%	309.2
Develop a skill	2.8	10.7	20.1	41.1	25.2	(214) 100.0%	224.5
Economical transport	3.8	3.3	9.9	23.5	59.6	(213) 100.0%	168.5

The role statement which received the highest score was "Travelling by canoe is one of the best ways to be a part of the wilderness". The next highest score was obtained by the statement, "The canoe enables me and my companions to be on our own and independent". Third highest was the role statement, "The canoe is one of the best ways to get from A to B in the North American wilderness". The statements with the lowest scores were those describing the canoe as providing the opportunity to develop a demanding technical skill, and as economical recreational transport. The refusal to rank role statements (non-response as determined by subtracting the raw totals for each statement from 230) increases with one minor anomaly as the composite score decreases, indicating that the least popular statements were not meaningful to the largest number of respondents. These results indicate that, for the most of the respondents, the canoe has important symbolic value, and that it is an integral part of a lifestyle of wilderness living and of the independence developed on a canoe trip.

Questions were asked to assess respondents' general attitudes toward risk on a long wilderness canoe trip, and to assess their perceptions of specific hazards. To examine their general attitudes, a list of five statements was prepared which ranged from a very negative attitude toward problems ("The problems and hardships are to be avoided completely") to a very positive attitude ("They are a desirable part of the challenge that I try to include in a long canoe trip"). Respondents were asked to choose the one statement which most closely represented their point of view. Table 5.21 shows that by far the largest proportion of respondents (78.4%) had positive attitudes toward problems. Forty people (17.6%) held the neutral attitude that problems "seem serious at the time, but the seriousness fades in retrospect". Only nine people (4.0%) had a negative view of

Table 5.21

Attitudes Toward Potential Problems and Hardships

Attitude		Percentage
The problems and hardships are to be avoided completely.		1.8
They seriously reduce the enjoyment of a trip.		2.2
They seem serious at the time, but the seriousness fades in retrospect.		17.6
They add to the character of a trip, should they occur.		58.1
They are a desirable part of the challenge that I try to include in a long canoe trip.		20.3
Total	(227)	100.0%

Number of missing observations = 3

problems.

The perceived seriousness of thirteen* specific potential hazards was also assessed. A scoring technique similar to that described for the question on the role of the canoe was used to facilitate the analysis of the perceived seriousness of hazards. The percentage of respondents identifying a hazard as very serious was multiplied by two, and the percentage of those who thought the same hazard was somewhat serious was multiplied by one. These totals were then summed for a composite seriousness score. The results are presented in Table 5.22. The highest seriousness scores were obtained by the potential hazards of "cold water", "rapids", "unskilled or careless companions", and "making poor judgments". Very few respondents thought that these potential hazards were not serious. There was a second group of potential hazards which the majority of respondents considered to be somewhat serious. These included "injury while portaging or lining", "unpleasant interaction with companions", "camping accidents", and "equipment breakdown". "Losing the way" and "falling behind schedule" were judged not to be serious by slightly larger proportions of respondents than judged them to be somewhat serious. Hardly anyone thought they were very serious. Hazards arising due to wild animals were considered not to be serious by the majority of respondents, and received the lowest seriousness scores of all potential hazards.

---

* The potential hazard, "remoteness", was omitted from the analysis because it was felt in retrospect that it was too unlike the others. It is a characteristic of a trip for which the canoeists search, and which, perhaps, emphasizes the seriousness of potential hazards.

Respondents were asked to list precautions they had taken on past trips for any of the hazards they had indicated were very serious. For analysis, the precautions taken were categorized in three groups. The first group included preparations made before the trip, such as obtaining good and suitable equipment, food, and clothing; assembling self-sufficiency skills and equipment such as a repair kit, waterproofing materials, and knowledge of first aid; doing research on the route and developing contingency plans; assessing and developing skills, including having shakedown trips, being in good shape, and knowing one's companions; and reaching agreement about how decisions would be made on the trip. The second group was formed by actions taken during the trip, such as avoiding problems by getting adequate rest; scouting, lining, and

Table 5.22

Perceived Seriousness of Potential Hazards

Potential hazard	Perceived seriousness			Total	Composite seriousness score
	Not serious	Somewhat serious	Very serious		
Cold water	4.4	33.3	62.2	(225) 100.0%	157.6
Rapids	3.1	40.4	56.6	(228) 100.0%	153.6
Unskilled or careless companions	12.8	28.8	58.4	(226) 100.0%	145.6
Making poor judgments	8.5	38.4	53.1	(224) 100.0%	144.6
Injury while portaging of lining	14.8	57.8	27.4	(223) 100.0%	112.6
Unpleasant interaction with companions	19.6	54.7	25.8	(225) 100.0%	106.3
Camping accidents	20.0	58.2	21.8	(225) 100.0%	101.8
Equipment breakdown	28.8	56.2	15.0	(226) 100.0%	86.2
Losing the way	47.3	39.7	12.9	(224) 100.0%	65.5
Falling behind schedule	47.3	45.6	7.1	(226) 100.0%	59.8
Carnivores	58.8	37.7	3.5	(228) 100.0%	44.7
Rodents	86.8	11.9	1.3	(227) 100.0%	14.5

portaging when necessary, and ensuring good communication among group members; preventing the effects of problems by staying close to shore on big lakes, running rapids one at a time, and staying together; and bearing the loss of problems which did develop by accepting that "these things happen" and that one would "learn for the next time". "Bearing the loss" is not normally considered to be a precaution; yet the preparedness to do it is part of an attitude toward risk that is as much a part of taking a long wilderness canoe trip as is the attitude that planning enables one to be resourceful and flexible. The third group of precautions included all responses which mentioned both a preparation made before the trip and an action taken during the trip. For example, one respondent who named cold water as a very serious potential hazard specified that his canoe party took wet suits on trips and stayed close to shore on big lakes.

For every potential hazard, a minority of respondents (27.8% or fewer) mentioned a combination of preparations and actions, as shown in Table 5.23. There were five potential hazards for which the precautions taken occurred primarily before the trip. These were the hazards of "unskilled or careless companions", "equipment breakdown", "unpleasant interaction with companions", "losing the way", and "making poor judgments". For the first four of these, few respondents (18.5% or fewer) mentioned actions taken during the trip, or a combination of preparations and actions. For the fifth, "making poor judgments", 34.6% of respondents took actions during trips. The hazards of "cold water" and "camping accidents" received attention before and during trips by similar proportions of canoeists, and relatively large minorities of respondents (27.8% and 20.5%, respectively) mentioned a combination of preparations and actions.

Table 5.23

Precautions Taken to Minimize the Hazards

Potential hazard	Precautions taken by respondents perceiving hazard to be "very serious"			Total
	Preparations made before the trip	Actions taken during the trip	Combination of preparations and actions	
Unskilled or careless companions	92.0	5.6	2.4	(125) 100.0%
Equipment breakdown	86.7	3.3	10.0	(30) 100.0%
Unpleasant interaction with companions	78.8	15.4	5.8	(52) 100.0%
Losing the way	66.7	18.5	14.8	(27) 100.0%
Making poor judgments	46.7	34.6	18.7	(107) 100.0%
Cold water	39.7	32.5	27.8	(126) 100.0%
Camping accidents	38.6	40.9	20.5	(44) 100.0%
Injury while portaging or lining	32.0	46.0	22.0	(50) 100.0%
Rapids	22.8	49.6	27.6	(127) 100.0%

Two potential hazards, "injury while portaging or lining" and "rapids", were given attention primarily during trips. For each of these two hazards, relatively large minorities of respondents made preparations before trips, or used a combination of preparations and actions. The three hazards of "falling behind schedule", "carnivores", and "rodents" received such a low response that they were omitted from the table.

All of the precautions specified for the potential hazards which canoeists indicated were very serious were summed. Most of the precautions mentioned, 53.7%, were those taken before trips. Fewer (28.9%) were actions taken during trips. The smallest proportion of responses (17.4%) suggested a combination of preparations and actions. These results support findings about canoeists' attitudes toward planning. That is, while planning (prior to the trip) certainly promotes security and enables flexibility and resourcefulness, it is not quite so certain to mean safety, since some actions must be taken during the trip to minimize hazards. Further, planning is relatively unlikely to remove every element of the unknown because of the kinds of hazards (eg. rapids, injury while portaging or lining, and camping accidents) with which canoeists must deal, at least in part, during the trip.

Respondents were asked to express their preferences for various aspects of the organization of long canoe trips. The results are presented in Figures 5.2a to 5.2g. Figure 5.2a shows that almost half of the respondents (46.9%) strongly preferred group decision-making, and almost twenty-five per cent mildly preferred this alternative. Only 28.6% preferred that a leader make final decisions. Flexibility in the organization of a trip was preferred by 69.6% of respondents (Figure 5.2b). A similar proportion (73.3%) preferred that the assignment of

Figure 5.2

Expressed Preferences for the Organization of Trips

Figure 5.2a: Decision-Making

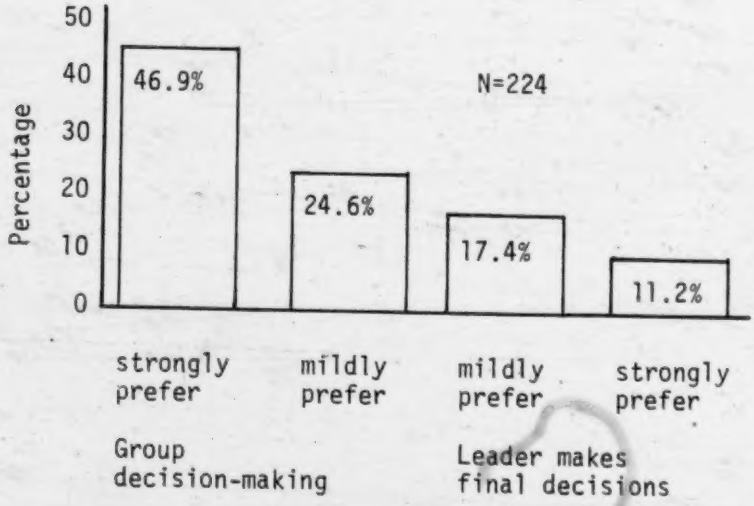


Figure 5.2b: Organization of the Trip

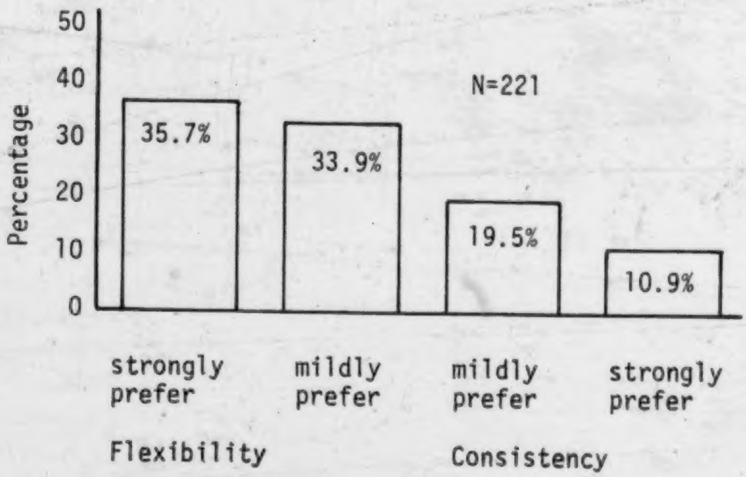


Figure 5.2c: Assignment of Responsibilities

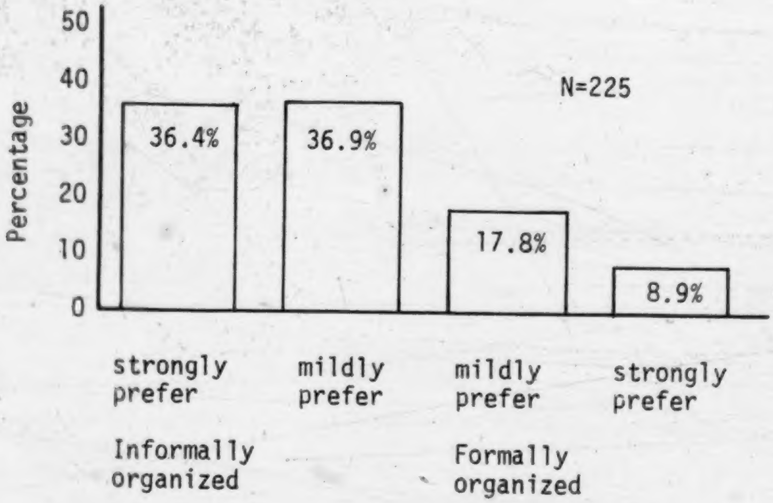


Figure 5.2d: Importance of Other Activities

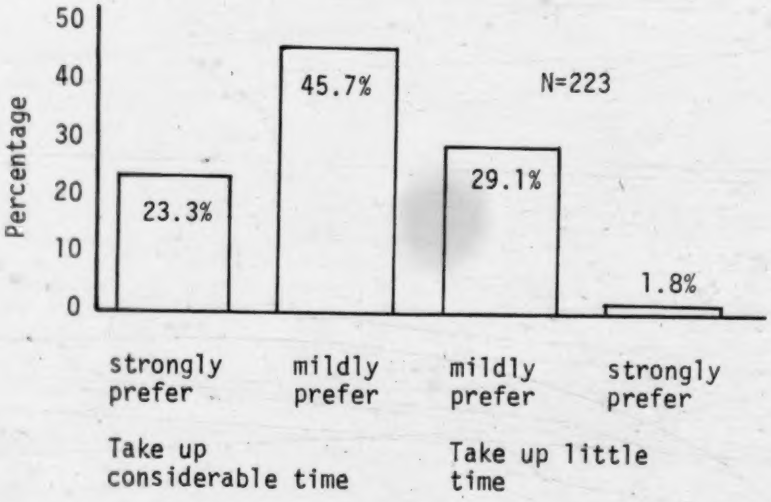


Figure 5.2e: Pacing the Trip

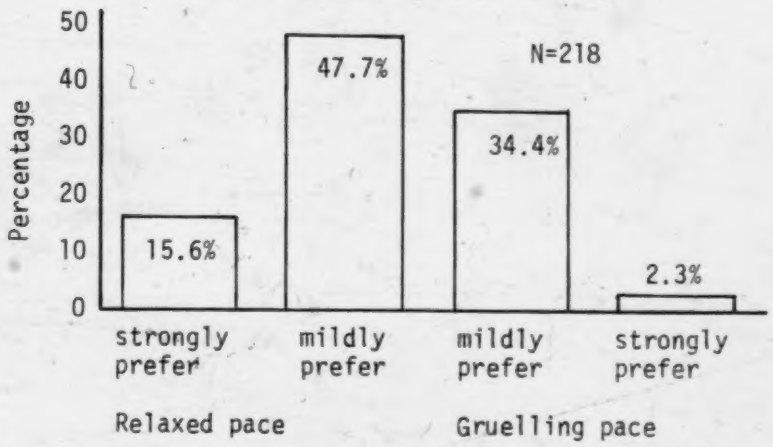


Figure 5.2f: Living Arrangements

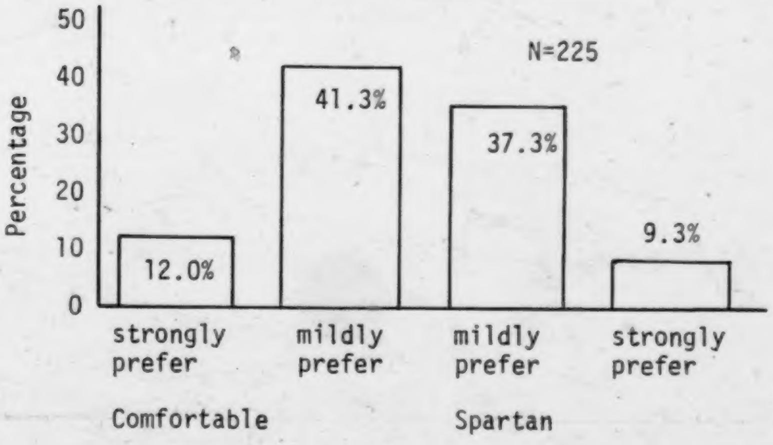
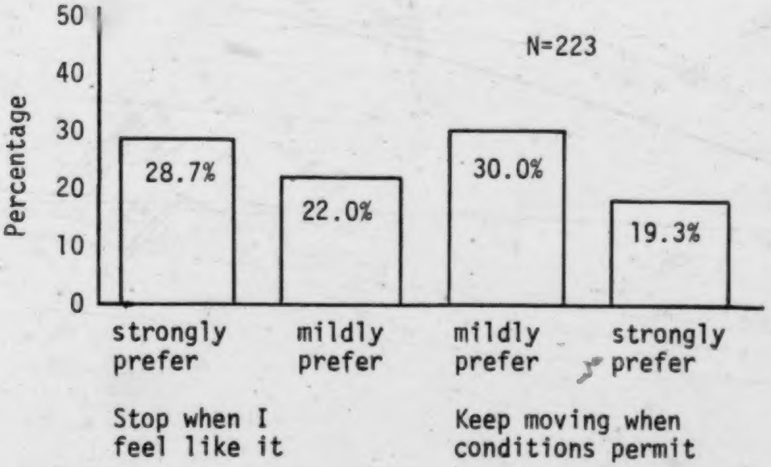


Figure 5.2g: Daily Schedule



responsibilities on trips be informally, rather than formally, organized (Figure 5.2c). In the latter two figures, these proportions were almost evenly split between mild and strong preferences. In the next figure (5.2d) it is evident that a large proportion (69.0%) preferred that activities other than canoeing be given considerable time on a trip as opposed to being given little time; but for most of these respondents, the preference was mild. The same is true regarding the pacing of a trip, shown in Figure 5.2e: 47.7% had a mild preference for a relaxed pace while 15.6% strongly preferred this pace. Despite majorities expressing preferences for one of the alternatives in each case described above, those choosing the other alternatives formed sizable minorities, which ranged between 28.6% (for leaders making final decisions) to 36.7% (for a gruelling pace).

In the remaining two figures, respondents are more evenly split between choices. Comfortable living arrangements were preferred by 53.3% of respondents, while 46.6% chose the spartan alternative (Figure 5.2f). For either alternative, many more respondents stated a mild preference than stated a strong one. Of those who made a choice regarding the daily schedule (Figure 5.2g), 50.7% preferred to "stop when I feel like it", while 49.3% preferred to "keep moving when conditions permit".

Almost all respondents indicated that they preferred to spend at least some time on activities other than canoeing. A wide range of other activities were enjoyed by canoeists. The most popular ones were nature appreciation (including watching wildlife, examining rocks, and observing plant life), fishing, hiking and exploring, enjoying camaraderie (especially around the campfire), photography, aesthetic appreciation of the surroundings (for example, watching sunsets, looking at scenery), and eating. Each of these activities was mentioned by at least 20.0% of the respondents.

Canoeists' perceptions of the nature of the tripping experience will influence whether they choose to participate in that experience again. Table 5.24 shows the degree of agreement or disagreement with descriptions of the canoe trip experience. There were very high proportions of respondents (over 90.0% in each case) who agreed that a trip was an adventurous, aesthetic, emotional, and physical experience. The largest proportions of those agreeing were in strong, rather than mild, agreement. Most striking was the 82.1% of all respondents who strongly agreed that the experience was an adventurous one. While 80.6% agreed that the experience was a social one, the largest group of those who agreed did so mildly, rather than strongly. Fewer than half of respondents agreed that the experience was a personal religious one. In this case, the highest proportion of those who disagreed did so strongly. A question might be raised about the wording of the statements about the social and religious nature of the experience. A higher rate of agreement might have been obtained for these descriptions had "social experience" been written as "intimate social experience", and had "personal religious experience" been written as "personal spiritual experience". Judging from the notations made by a few respondents, the words which were used may have had undesirable connotations for some of the survey group. A further description which might have been useful, judging from responses to the motivational questions discussed in a subsequent section, could have been "The trip was an educational experience".

While a high rate of strong agreement with most of the descriptions does not mean that the experience itself was, for example, strongly adventurous or emotional, it does indicate that for almost all respondents

Table 5.24

The Nature of a Canoe Trip Experience

Description of the experience	Strongly disagree	Mildly disagree	Mildly agree	Strongly agree	Disagree	Agree	Total
Adventurous	-	2.6	15.3	82.1	2.6	97.4	(229) 100.0%
Aesthetic	1.3	4.4	22.7	71.6	5.7	94.3	(229) 100.0%
Emotional	1.3	5.3	25.9	67.5	6.6	93.4	(228) 100.0%
Physical	1.3	6.6	33.5	58.5	7.9	92.1	(229) 100.0%
Social	6.6	12.8	44.9	35.7	19.4	80.6	(227) 100.0%
Religious	36.4	24.3	25.2	14.0	60.7	39.3	(214) 100.0%

the canoe trip experience consists of many aspects simultaneously. On this basis, it is reasonable to suggest that the experience has great impact on its participants.

Perhaps related to the impact of the experience is the role played by time on a long trip. A count was made of the number of respondents who mentioned the importance of time somewhere in the questionnaire, usually in one of the two questions about the differences between long and short (weekend) trips and about other activities which might produce the same satisfactions as canoe tripping. An example of a statement about the importance of time is this one: "It takes at least two weeks before I get into the rhythm of things". Seventy-three respondents, or 31.7%. specifically mentioned time as a crucial element in the experience. This figure is an underestimate of those to whom it might be important, as 18.5% of respondents did not answer the "optional" question on long and short trips; and in the other question, the only record which was required was the names of activities which could produce the same benefits with similar impact as canoe tripping.

To summarize, the experience of a canoe trip is multidimensional, and has considerable impact on its participants. Usually, it is a democratic, flexible, and informal undertaking by a small group of people interested in developing (at least temporarily) a wilderness life-style. It is often characterized by a tension between anticipation of a certain degree of risk, and the preparation and willingness to deal with potential difficulties.

Joanne strongly agreed that her canoe trip was emotional, social, adventurous, and aesthetic. She mildly agreed that it was physically strenuous, and strongly disagreed that it was a religious experience.

For her, the most important role of the canoe was enabling her "to be a part of the wilderness". Next in importance was getting "from A to B in the North American wilderness". Then came the roles of enabling independence, providing economical transport, and giving the opportunity to develop technical skill. She mentioned time as an important factor in the difference between short and long trips, because she wants to prolong the lifestyle developed. Joanne was mildly inclined toward group decision-making, flexibility in organization, devoting little time to activities other than canoeing but stopping from time to time to do other things, keeping a relaxed pace, and having comfortable living conditions. She strongly preferred that the responsibilities of group members be organized informally. The activities other than canoeing which she most enjoyed doing during a trip were shooting white water, taking photographs, and hiking around. She added a fourth activity to the list, namely, journal keeping. Joanne held a neutral attitude toward problems - "They seem serious at the time but the seriousness fades in retrospect". There were only two potential hazards she considered to be very serious: making poor judgments and careless companions. (She indicated that unskilled companions were only somewhat serious.) She did not list a precaution for the latter, but for the former, she had worked toward open group communication and trust. Those hazards which were somewhat serious were rapids, cold water, unpleasant interaction with companions, injury while portaging or lining, and falling behind schedule ("because it leads to tensions and anxieties in some group members"). She was undecided about the seriousness of equipment breakdown, noting that, "just about always, canoes and gear can be repaired".

Doug strongly agreed that the trip was an emotional, adventurous, and physically strenuous experience. He mildly agreed that it was social, aesthetic, and religious. His two most important perceived roles for the canoe were identical to Joanne's. However, the third most important role was in providing the opportunity to develop a skill. Economy was least important. The "sense of timelessness" was an important aspect of a long trip. He reported a mild preference for each of the following: group decision-making, flexible organization, formal assignment of responsibilities, spending considerable time on other activities, a relaxed pace, comfortable living arrangements, and keeping moving when conditions permitted. His favourite activities were assessing ("scouting") rapids, watching wildlife, and filming the trip. He thought that problems added to the character of a trip, should they occur. The hazards he viewed as serious were rapids (for which the precaution was scouting), cold water (which required awareness), losing the way (which could be avoided by good map reading), problems with companions (who must be selected carefully), and making poor judgments (which could be avoided with proper care). Rodents, equipment breakdown, and falling behind schedule ("within limits") were not serious at all.

Remembering the Trip

Probably most people start to recall their experiences while their trips are still in progress. One very palpable expression of the memorable aspects of a trip is the emotions felt at the moment of reaching the destination of the canoe journey. Memories are also focused by the perceived benefits provided by the trip, especially when these benefits have a substantial influence on one's daily life; and by records which people keep in words or in photographs.

The emotion upon arriving at the destination of the canoe journey which was mentioned by respondents more often than any other was that of despondency, expressed as feeling let down, sad, sorry that the trip was over, depressed, or empty. Other commonly expressed emotions were elation, happiness, and exhilaration; pride and a sense of achievement; relief with success and thankfulness for safety; a generalized satisfaction; and a desire for physical comforts. Often, emotions were mixed, as for the respondent who recorded his emotions as "thankful we were safe, but sorry the trip was over". The rare circumstance included the extremes of elation and depression, which one respondent described as "chaos".

Generally speaking, the expressed emotions are very difficult to count and to interpret, especially because their meanings are vague and because they overlap with one another. For example, it is impossible to decide if "satisfaction" for one person is equivalent to "pride" (of achievement) for another. It may be that a feeling of exhilaration stems from an overwhelming feeling of pride, or it may be more closely related to great relief at having arrived safely. The information gained by this question about emotions provides only a very sketchy idea of how people felt upon their arrival at their destination.

However, implications may be drawn from the nature of the expressed emotions which are suggestive rather than conclusive. It was evident that the feeling of despondency was very common. This may imply that trips had great meaning for their participants, who were saddened to finish a powerful experience. That emotions were often mixed may suggest that there is some degree of tension between positive feelings about the trip and negative feelings (like fear). This is also suggested by the observation that relief and thankfulness were often expressed. Powerful positive feelings (like exhilaration) were expressed much more frequently than milder positive feelings (like contentment). The predominance of these more extreme emotions might be related to the high impact that such an experience could have. That pride and achievement were also expressed relatively frequently may implicate the importance of self-reliance ("doing everything for yourself") to the individual's self-concept.

The benefits claimed for long wilderness canoe trips were equally diverse as the emotions, with many of the benefits being claimed by only a few respondents. Since little was to be gained by regrouping the benefits into fewer categories, only those which were mentioned most frequently (ie., by more than 10.0% of respondents) are listed here. A most frequently mentioned benefit was learning about oneself, mainly through meeting challenges. This included gaining self-confidence, self-respect, ego support, and control of one's fear; and having proof that "I can be self-sufficient" or that "I can still do it". Another benefit was that of mental and emotional health which created peace, tolerance, patience, lowered blood pressure, "fitness to fight civilization", emotional health, and so on. A further benefit which was mentioned frequently was gaining geographic insight - learning about a new place, seeing untouched country, developing an appreciation for the north, seeing a grizzly. Physical fitness was a benefit claimed relatively frequently by respondents, as well as other forms of self-improvement such as learning wilderness camping and travelling skills, learning ways of getting along with others, and realizing the nature of wilderness dangers (and therefore, the importance of planning and practice). Getting to know one's companions better was also mentioned as a benefit of long canoe trips by more than 10.0% of respondents.

According to the responses from interview subjects, perceived benefits are not directly related to motivations for going on such trips; they simply accrue from the experience. However, whether respondents perceived that these benefits could or could not be provided for them through participation in other activities (including daily life) gives some indication of what is unique about wilderness canoe tripping. Table 5.25 shows that the benefits which, for most canoeists, were not provided with similar impact by other activities were "gaining geographic insight", "self-improvement", and "mental and emotional health". Proponents of wilderness recreation in the past often have characterized wilderness users as intellectually curious (for example, see Catton, 1969) toward which characterization the first benefit, and perhaps the second, seem to point. It is not impossible to gain geographic insight by means other than canoe tripping; but an intense experience with a relatively unfamiliar environment, such as provided on a long wilderness canoe trip, produces an intimate and more complete knowledge of it than would a more brief encounter. Wilderness proponents have also claimed that mental health benefits result from wilderness use (for example, see Smith, 1974; and Bernstein, 1972). It is conceivable that canoeists may require the time and physical activity required by a long canoe trip to realize these benefits (see the discussion of the role of time on canoe trips on page 133).

Those benefits claimed by respondents which they could derive from other activities were "knowing self", "knowing others", "physical fitness", and a wide variety of miscellaneous benefits which were grouped together.

Table 5.25

Whether Other Activities Provide the Same Benefits with Similar Impact as Canoe Tripping

Benefit	Provision of benefit by other activities		Total
	Provided by other activities	Not provided by other activities	
Gaining geographic insight	30.8	69.2	(52) 100.0%
Self-improvement	37.8	62.2	(37) 100.0%
Mental and emotional health	40.5	59.5	(54) 100.0%
Knowing self	55.6	44.4	(54) 100.0%
Other benefits	61.6	38.4	(224) 100.0%
Knowing others	64.5	35.5	(31) 100.0%
Physical fitness	68.6	31.4	(35) 100.0%

A large majority of respondents (192 of 225, or 85.3%) kept written records of their trips. Of these, 79 of them did so primarily in order to help them remember the trip in detail. Forty-three of the respondents keeping written records used them to record private thoughts. A similar number (42) stated one of a diverse group of reasons for keeping a journal, and 28 respondents gave more than one reason.

Most of the canoeists remembered the trip they recalled for the questionnaire from time to time (52.6%), or often (41.3%). The memories for the great majority were mainly pleasant (83.4%), and for a few, there were some pleasant thoughts as well as some unpleasant ones. Only one person had mainly unpleasant memories of his trip.

Joanne kept a written record of her trip primarily to give herself a creative outlet. She has thought about the trip often since it occurred, remembering both pleasant and unpleasant things. The benefits she received from having done the trip, all benefits which she can obtain from other activities, were "learning about [herself] and how [she] relates to others", learning about the nature of white water", and "getting into [her] photography". The first has been obtained in some work situations with a close staff; the second benefit can be obtained in many places, although she adds, "there is something to knowing the changing moods of one river from beginning to end"; and the third benefit develops naturally when she travels, "being less tied up with daily details". At the very end of her trip, she experienced "an acute case of mixed emotions: happy, sad, frustrated, glad".

Doug's emotions were not mixed - he simply wanted "to paddle back up to the source immediately". The trip gave him an "increase in fitness and stamina", "a smoother disposition", and a "better perception of work problems". He checked one of the three spaces for indicating whether the benefits were obtainable from other activities, and wrote in "mountain climbing", but it is unclear whether this applies to only one benefit or all three. Doug kept a record of his trip in order to record his private thoughts. He has thought about his trip from time to time, and it has given him mainly pleasant memories.

Motivations

Questions which asked respondents to identify specific reasons for canoe tripping formed part of the questionnaire. The canoeists were also asked what features of canoe trips appealed to them, to see if the appealing features might be related to motivations. Since it is uncertain that it is even meaningful to ask people to identify motivations (that is, do they think in motivational terms?), additional questions attempted to assess whether the questions on motivations were meaningful to the respondents.

The proportions of respondents who reported on the nature of their motivations are shown in Figures 5.3a to 5.3e. Only about twelve per cent of all respondents claimed never to have thought about their motivations for wilderness canoe tripping in the past (Figure 5.3a). It was more common for canoeists to think about them from time to time, rather than frequently. Figures 5.3b and 5.3c show that slightly more than half of the respondents reported that while they were planning or taking a canoe trip, their motivations were occasionally on their minds. However, more people had their motivations uppermost in their minds while planning a trip (26.4%) than while taking the trip (13.8%). A commonsense explanation for this discrepancy is that thinking about one's motivations may have greater practical value at a time when the trip is being shaped and could take a number of different courses. During the trip, a canoe party is more or less committed to what has been planned, and becomes concerned with living the day-to-day experience.

In Figure 5.3d, it is evident that a sizable minority of respondents (30.8%) considered their motivations to be complex. More (43.2%) thought the opposite - that their motivations were simple. There was more agreement that motivations were somewhat or strongly related to each other (52.2% and 45.5%, respectively), as shown in Figure 5.3e.

Figure 5.3

The Nature of Motivations

Figure 5.3a

"In the past, I have thought about my motivations for canoe tripping ... "

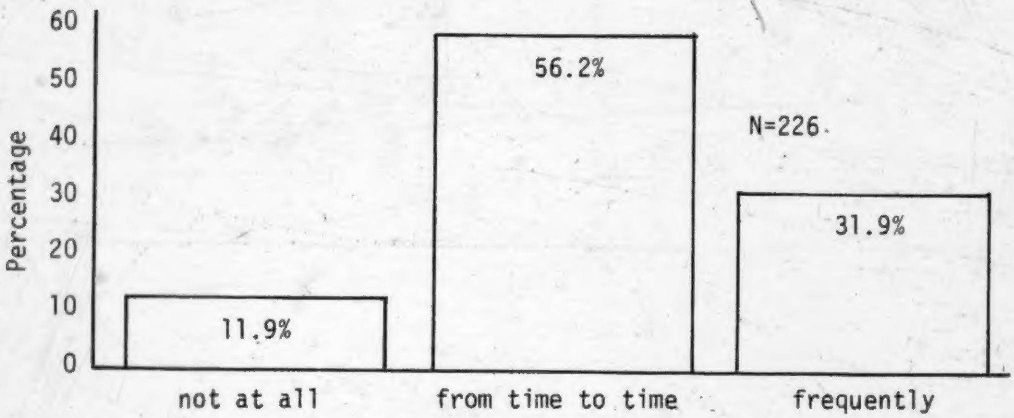


Figure 5.3b

"When I plan a trip, my motivations are ... "

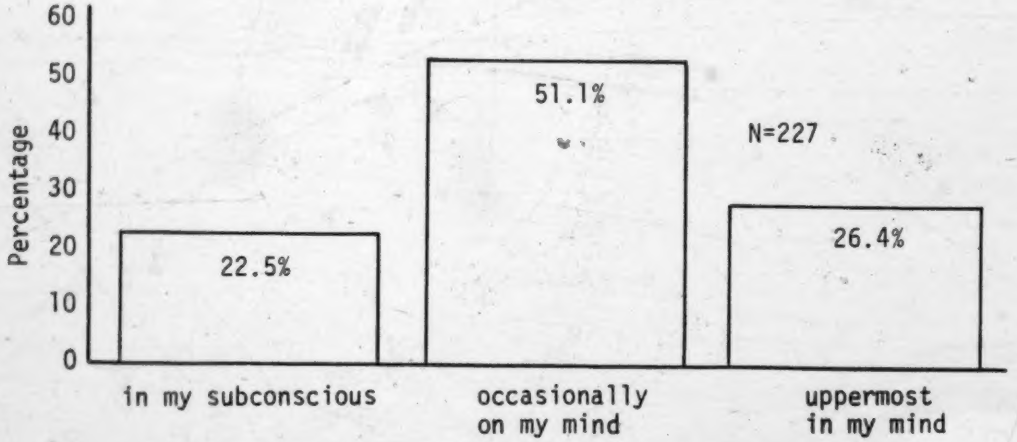


Figure 5.3c

"When I'm on a trip, my motivations are ... "

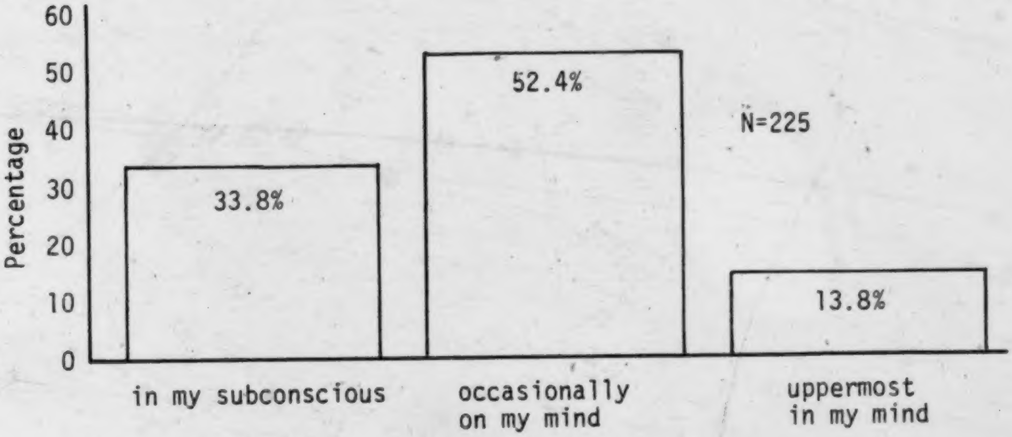


Figure 5.3d

"My motivations seem to be ... "

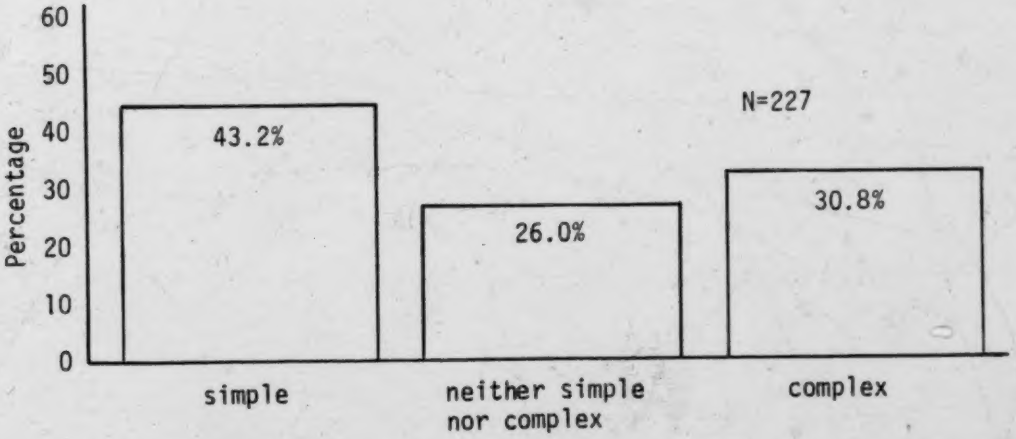
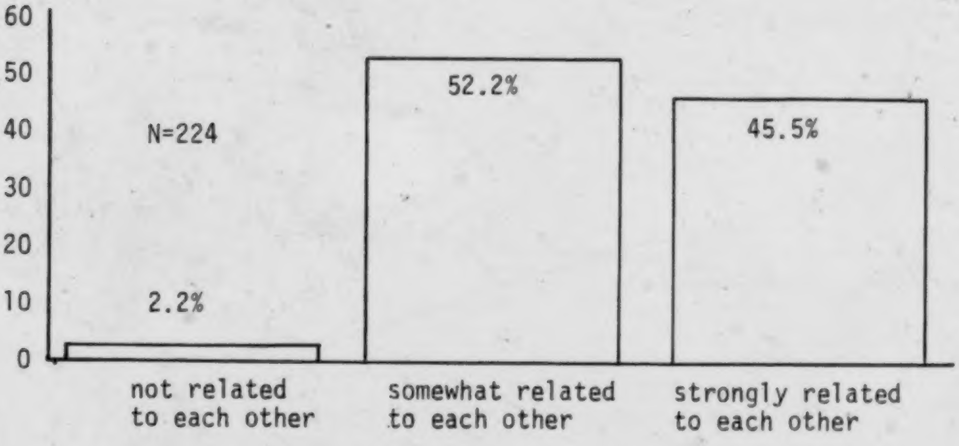


Figure 5.3e

"My motivations seem to be ... "



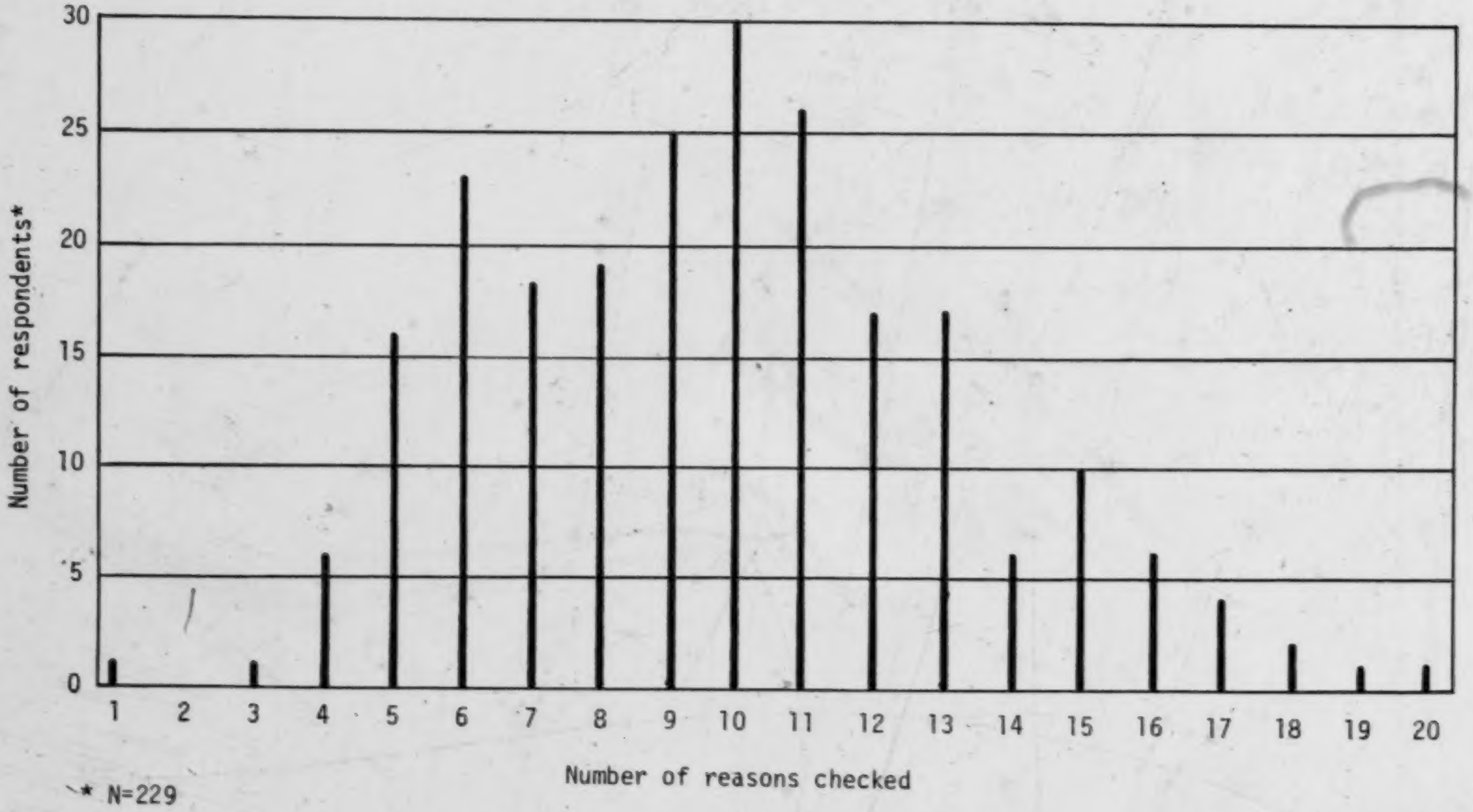
A large proportion of respondents (84.5%) reported that identifying their motivations was not a difficult task. Furthermore, most (95.2%) found that the question which asked them to do so was either somewhat relevant (31.3%) or very relevant (63.9%) to their canoe tripping experience. These results indicate that the responses to the questions on motivations likely are meaningful ones.

The question about motivations produced a list of "the most important reasons why [respondents liked] to take long canoe trips in the wilderness". The number of reasons which were checked ranged from one to twenty, as shown in Figure 5.4. The modal response was ten reasons. Table 5.26 indicates that there were nine reasons for taking long wilderness canoe trips which more than half of the respondents indicated were important to them. Only four of the reasons were important to fewer than 20.0% of respondents. These figures reveal that the reasons for going on canoe trips are many and varied for most canoeists.

The most frequently chosen reason was to "experience the out-of-

Figure 5.4

Number of Reasons for Wilderness Canoeing Checked by Respondents



* N=229

Table 5.26

Most Important Reasons for Taking Long Wilderness Canoe Trips

Reason		Percentage*
1.	Experience the out-of-doors intensely	84.2
2.	See wildlife	75.5
3.	For love of adventure	74.7
4.	See beautiful scenery	71.2
5.	See the ecology of different areas	64.2
6.	Use wilderness living skills	62.0
7.	Escape the routines of everyday life	61.1
8.	See scenery that most others can't see	60.3
9.	Meet the challenge of physical endurance	55.0
10.	For the challenge of white water	48.9
11.	Face the unknown	45.9
12.	Achieve something worthwhile	36.7
13.	Experience dangerous situations I can handle	31.0
14.	Socialize with my good friends	29.7
15.	For good fishing	27.9
16.	Prove to myself and others that I can do it	27.5
17.	For another reason not mentioned	27.5
18.	Belong to a group of wilderness adventurers	25.3
19.	For the historical interest	24.5
20.	Be the first to do a particular trip	16.6
21.	Escape the demands made by other people	12.2
22.	Experience discomfort	8.3
23.	Commemorate an historical event	4.8

* Each percentage is based on a total of 229 respondents.

doors intensely" (number 1 in Table 5.26), which was important to 84.2% of canoeists. Other popular reasons (that is, those mentioned by more than 30.0% of respondents) fall into broader categories. Three of these seem to be related to a desire to gain geographic insight (which was discussed in the previous section). These are the reasons of seeing wildlife (2), seeing beautiful scenery (4), and seeing the ecology of different areas (5). Interest in history (19), another reason which belongs in this category, was mentioned much less frequently. Another group of reasons tends to emphasize doing something which is different and sets its participants apart from other people. This group consists of the motivations to experience adventure (3), to escape routine (7), and to see scenery that others cannot see (8). Two other reasons which would belong to this group but which were not mentioned so frequently were to "belong to a group of wilderness adventurers" (18), and to "be the first to do a particular trip" (20).

The two preceding categories dominated the eight most frequently mentioned reasons. The next five reasons belong to a category in which a desire exists to test oneself in some way: by meeting the challenges of physical endurance and white water (10), by facing the unknown (11), by achieving something worthwhile (12), and by experiencing "dangerous situations I can handle" (13). One self-testing reason was somewhat lower in popularity. This was to "prove to myself and others that I can do it" (16). It may be that these words overstated the motivation and their implications were too dramatic for respondents to find them meaningful. The popular statements related to self-testing goals were more direct and specific. The remaining reason which could be construed as a self-testing one, to "experience discomfort" (22), was important to only 8.3% of respondents. That the important motivations could be grouped so readily supports the feeling of almost all canoeists that their motivations are somewhat or strongly related to one another (refer to Figure 5.3e).

Two of the most popular reasons could not be categorized readily. These were to "experience the out-of-doors intensely" (1) and to "use wilderness living skills" (6), although these may be related somewhat to the desire to develop geographic insight. Less popular reasons form a miscellaneous group, including to "socialize with my good friends" (14), "for good fishing" (15), for other reasons not included in the list (17), to "escape the demands made by other people" (21), and to "commemorate an historical event" (23). The statement, "socialize with my good friends" was not well worded, and may have been mentioned as important more frequently were it to have said, "develop further my relationship with my friends". (The word, "socialize", had frivolous implications for some.) The "other" reasons were too varied and had too few respondents subscribing to them to warrant sub-categorization. They included curiosity about a specific area; a desire for a total, almost mystical, experience; a wish to "think about things more clearly"; wanting to share the experience with someone else; collecting material for writing or lecturing; and the desire to have fun.

While identifying motivations was a relatively easy task for most (page 144), it is probable that ranking them was less easy, and possible that it was less meaningful. Consequently, it is important to view the list of ranked motivations (Table 5.27) not as a precise and accurate ordering of motivations by their importance to the respondents, but as a collection of motivations which were more important to respondents than others which were not ranked. A scoring procedure was used to facilitate

Table 5.27

Ranked Reasons for Taking Long Wilderness Canoe Trips

Reason	Composite ranking score	Percentage of respondents not ranking reason*
Experience the out-of-doors intensely	238.8	37.2
For love of adventure	210.6	42.5
Escape the routines of everyday life	108.8	67.3
Meet the challenge of physical endurance	83.0	66.4
See wildlife	80.5	65.5
See the ecology of different areas	80.5	69.5
See beautiful scenery	79.2	68.1
Face the unknown	69.3	76.5
For the challenge of white water	69.1	74.3
Use wilderness living skills	67.0	76.5
For another reason not mentioned	64.0	76.5
See scenery that most others can't see	59.2	80.1
Achieve something worthwhile	57.8	83.2
Socialize with my good friends	46.1	84.5
For good fishing	38.4	86.3
Belong to a group of wilderness adventurers	33.7	88.1
Experience dangerous situations I can handle	24.5	89.8
Prove to myself and others that I can do it	24.0	89.8
For the historical interest	20.6	90.3
Escape the demands made by other people	16.2	93.8
Be the first to do a particular trip	8.5	97.3
Commemorate an historical event	2.4	99.1
Experience discomfort	0.9	99.1

* Each percentage is based on a total of 229 respondents.

the analysis of this question. A rank of one was multiplied by five, a rank of two by four, and so on. These scores were summed to produce a composite ranking score. The two reasons with the highest ranking scores by far were to "experience the out-of-doors intensely" and "for love of adventure", yet these reasons were not ranked at all by 37.2% and 42.5% of respondents, respectively. All of the remaining reasons were not ranked by at least 65.0% of respondents, which indicates considerable diversity (except for the two most popular reasons) in the reasons which were more important than any others to the canoeists. The third highest ranking score was obtained by the reason, to "escape the routines of everyday life", which was more than one hundred points below the reason "for love of adventure". The next four scores, which were very close in value, were obtained by the reasons, to "meet the challenge of physical endurance", "see wildlife", "see the ecology of different areas", and "see beautiful scenery". Thus, it appears that self-testing reasons were less important when reasons were ranked, while the desires to gain geographical insight and to have a unique experience were very important.

The appealing aspects of a long wilderness canoe trip are closely related to the motivations for taking one in that they provide the setting in which specific goals can be attained. Unfortunately, the question on appealing features asked two questions at once; that is, it asked respondents to indicate within the same question which features were appealing and which ones contrasted with their daily lives. It is reasonable to assume that most features of a long wilderness canoe trip will contrast with most people's lives, but this is not true for all people. An example of the exception is the respondent who noted:

> My everyday life is either characterized by, or growing toward

> being characterized by, those ideal elements. If a life-style is worthwhile, then why enjoy those characteristics for a fraction of the year only?

For this reason, it is not completely clear how the responses should be interpreted. While the responses to the question are presented in Table 5.28, it should be noted by the reader that some respondents may have interpreted the question differently from others. The confusion would undoubtedly be amplified in the ranking question which followed (that is, did respondents rank according to the greatest appeal or the greatest contrast; alternatively, did anyone rank features which appealed but did not contrast with their daily lives?). Consequently, the results of the ranking are not presented.

Six features appealed to more than 50.0% of the respondents, and four of these were particularly appealing. They were that "Activities become attuned to land and weather", "Physical activity becomes a way of life", "A sense of timelessness develops", and "Life is simple". These features can be conceived to be very closely interrelated with one another. Life is simple because it is attuned to land and weather; timelessness develops because life is simple and it is in tune with environment; physical activity is related to tasks in the physical environment, to basic (simple) life support, and to progress along one's journey. These four most appealing features, I would suggest, are very closely related to the most important motivation identified by most canoeists: the desire to experience the out-of-doors intensely. That is, these four features are probably the most critical ones in making the outdoor experience an intense one.

While the feature, "[It is] uncommon to see other people", was a relatively popular one (fifth in the list of sixteen), it is surprising

Table 5.28

Appealing Features of a Long Wilderness Canoe Trip

Feature	Percentage*
Activities become attuned to land and weather	71.2
Physical activity becomes a way of life	69.9
Sense of timelessness develops	65.0
Life is simple	63.3
Uncommon to see other people	53.1
Canoe party is independent	50.9
Decisions have immediate consequences	38.5
Canoe party is responsible only for itself	34.5
Worthwhile objective is set and achieved	34.1
Accustomed comforts are lacking	26.5
I feel as if I'm a part of beauty	26.1
There is no sense of urgency	25.7
Decisions are compelling	13.7
Another appeal not mentioned	13.3
I can be with my friends continually	8.0
Consequences of decisions are short-term	4.9

* Each percentage is based on a total of 226 respondents.

that it was appealing to only 53.1% of respondents, given that meeting no other people or only a few was a minimum condition for a canoe trip required by 84.3% of respondents (see Table 5.18). Perhaps, for some canoeists, the absence of other people is not appealing in itself, but desirable for the effects it produces, such as creating independence for the canoe party, preventing the introduction of complicating social factors during the intense outdoor experience, and contributing to the feeling of being a unique wilderness adventurer who sees country and does things that most other people do not see and do.

Only three of the specified features were appealing to fewer than 25.0% of respondents. Once again, the open-ended category received such a diversity of responses, and from so few of the canoeists, that establishing sub-categories was not deemed worthwhile. Examples of these other features which appealed to some respondents were "no constant barrage of news and entertainment" and other escape-oriented features; "one is forced to confront reality with no means of escape"; "I relive the explorer experience"; and "I get a sense of physical space".

Joanne responded to eleven of the listed motivations, emphasizing with the use of more than one check mark the two motivations, "to experience the out-of-doors intensely" and "to socialize with my good friends". She qualified the latter motivation by adding, "to learn about ourselves from each other". She listed another reason, which was "to live a life-style of dealing with and accepting life day-to-day". Her five most important motivations were as follows, in order of importance:

1. to experience the out-of-doors intensely
2. to socialize with my good friends
3. for the challenge of white water
4. to see the ecology of different areas
5. for love of adventure

She found the question about motivations to be neither easy nor difficult, but very relevant. In the past, she has thought about her motivations from time to time. While planning a trip, they are uppermost in her mind; but they enter her subconscious while the trip is in progress. She feels her motivations are simple, and strongly related to one another.

Those features of a canoe trip which are appealing to her are listed below:

- Decisions have immediate consequences
- A sense of timelessness develops [marked with emphasis]
- Decisions are compelling
- The canoe party is independent
- Life is simple [marked with emphasis]
- Physical activity becomes a way of life
- I feel as if I'm a part of beauty ["of beauty" was crossed out and replaced with "the earth's processes"]
- Our activities become attuned to the land and the weather

Doug thought the question about motivations was easy to answer and very relevant to his experience of taking long canoe trips. He recorded that his motivations were simple and somewhat related to each other. Although he had thought about his motivations from time to time in the past, while planning or while taking a trip they were in his subconscious.

He specified eight motivations which were meaningful to him. In order of importance, the first five of these were:

1. for love of adventure
2. to meet the challenge of physical endurance
3. to experience the out-of-doors intensely
4. to use wilderness living skills
5. for the challenge of white water

Only four features of canoe trips particularly appealed to him. They were:

- A sense of timelessness develops
- The canoe party is independent
- Physical activity becomes a way of life
- Our activities become attuned to the land and the weather

In this chapter, variables have been analyzed as independent entities which describe the respondents to the survey. Interpretations have been made which relate the variables to each other. In the next chapter, tests are made of the relationships between some of the variables in an attempt to explain those relationships.

CHAPTER SIX

ASSOCIATIONS OF RESPONDENTS' CHARACTERISTICS, MOTIVATIONS AND TRIP LOCATIONS WITH SELECTED VARIABLES

Introduction

The people who were surveyed for this research formed a relatively homogeneous group. Consequently, a high degree of consistency in responses was expected to occur, and did occur. One result is very low numbers of respondents in some categories of response. An example is the way in which canoeists perceived the nature of the canoe trip experience (displayed in Table 5.24). The low frequencies in some categories created a problem for analysis because these categories were not represented adequately for inferences to be made from them to the larger population of canoe trippers, or for standard tests of association to be used. This problem was amplified by the relatively low total number (230) of respondents to the survey. Due to these low frequencies, analysis using a third (or control) variable as a test factor in associations between two other variables was not possible, as it would have split categories of response even further. Therefore, the analysis of associations between variables was restricted to simple crosstabulations of two variables. In every case, the chi-square statistic was used to test the significance of differences at a significance level of .05.*

Due to the homogeneity of the survey group, few variations among the respondents were discovered. This chapter examines those few cases in which variations appeared. Rather than discussing specific and singular associations, the analysis focuses on series of associations between variables which point toward general interpretations and conclusions. The first section deals with characteristics of respondents (namely, club membership and sex) which appeared to influence their motivations and experiences. The next section is concerned with several motivations, each of which was associated with a number of other variables. Finally, the associations of trip locations with other variables are analyzed.

---

* See Appendix 11 for an explanation of the use and meaning of chi-square.

Some Characteristics of Respondents Which Were Associated with Other Variables

The characteristics of respondents which were used in this study were country of origin, sex, age, marital status, parenthood, occupation, and club membership. Generally speaking, most of these were not associated with many other variables in ways which distinguished specific sub-groups of canoe trippers. The most important exception was club membership. Sex of the respondent was a minor exception.

Members of outdoor clubs were distinguished from respondents who were not club members by their relative rejection of a number of conditions which would tend to make canoe trips more arduous. Although the motivation, "to meet the challenge of physical endurance", did not distinguish between club members and non-members, club members less frequently than non-members preferred to conduct their trips at a gruelling pace, less frequently required large lakes and portages en route, were motivated less often to experience discomfort, and less frequently recalled trips which had met all of the five conditions for wilderness trips which were specified in the questionnaire. The significance levels for these associations are summarized in Table 6.1. While significance levels fell well within the specified level of .05, the associations tended to be weak, rather than strong, with differences between club members and non-members averaging about ten per cent. The exception to these weak associations is presented in Table 6.2, where it is evident that the difference between proportions of club members and non-members preferring a gruelling pace is about twenty per cent. It should be remembered that, with the exception of recalled trips having met all five conditions, the more arduous alternatives were preferred by minorities of respondents, whether or not they were club members.

Table 6.1

Summary of Significance Levels for Associations Between Club Membership and Selected Variables

Prefer gruelling pace for canoe trip	Corrected chi square = 7.14 1 Degree of freedom p<.01
Minimum conditions for canoe trip	
Portages required en route	Chi square = 9.02 2 Degrees of freedom p<.01
Large lakes required en route	Chi square = 10.12 2 Degrees of freedom p<.01
The motivation, to experience discomfort	Corrected chi square = 5.88 1 Degree of freedom p<.02
Trip met all five conditions for wilderness canoe trip	Corrected chi square = 5.05 1 Degree of freedom p<.03

Table 6.2

Preference for the Pacing of a Canoe Trip
by Club Membership

Preferred pace	Club membership		Total
	Non-member	Member	
Relaxed pace	57.1	76.7	(136) 63.8
Gruelling pace	42.9	23.3	(77) 36.2
Total	(140) 100.0%	(73) 100.0%	(213) 100.0%

Corrected chi square = 7.14 1 Degree of freedom p<.01
Number of missing observations = 17

While club members tended to reject these arduous alternatives more frequently than non-members, they were not distinguished from non-members by their preferences for any particular condition or group of conditions. Club members did not indicate more frequently than non-members that they were motivated to socialize with friends on trips, although they did report a preference for travelling in larger groups more often than the others. Table 6.3 shows that, while non-members were evenly split between preferring smaller parties (of one or two canoes) and larger parties (of three or more canoes), 67.1% of club members preferred the larger groups.

The reader will recall (from Chapter Five) that the motivation for canoe tripping which was expressed more frequently than any other was "to experience the out-of-doors intensely". Although club members were not significantly different from other respondents in how frequently they

Table 6.3

Preferred Size of Canoe Party by Club Membership

Preferred size of canoe party	Club membership		Total
	Non-member	Member	
1 or 2 canoes	50.0	32.9	(99) 44.2
3 or more canoes	50.0	67.1	(125) 55.8
Total	(148) 100.0%	(76) 100.0%	(224) 100.0%

Corrected chi square = 5.28 1 Degree of freedom p<.05
Number of missing observations = 6

chose this motivation, differences appeared when the functions of the clubs to which they belonged were considered. In Table 6.4, those who did not belong to clubs are compared with members of clubs with different functions. A very large proportion of non-members (87.6%) indicated the importance of this motivation to them. Members of clubs which existed mainly to promote activities reported that this motivation was important considerably less frequently (66.7%). The other group of club members, whose clubs served to promote the preservation of wilderness as well as activities, were almost identical to non-members in the frequency with which they indicated the importance of this motivation (87.5%).

The findings presented in Table 6.4 are supported by those shown in Table 6.5. Almost always, if an outdoor club promotes activities, the learning of skills is one of those activities. Fewer people reported learning canoeing with a club (28) than reported being members of outdoor

Table 6.4

The Motivation, "to Experience the Out-of-Doors Intensely", by Club Membership and Function of Club

The motivation, to experience the out-of-doors intensely	Non-member of club	Member of club*		Total
		Club promotes activities mainly	Club promotes activities and preservation of wilderness	
Not important	12.4	33.3	12.5	(33) 15.0
Important	87.6	66.7	87.5	(187) 85.0
Total	(145) 100.0%	(27) 100.0%	(48) 100.0%	(220) 100.0%

Chi square = 8.12 2 Degrees of freedom $p<.02$
Number of missing observations = 5

* Only 5 respondents reported being members of clubs which mainly promoted the preservation of wilderness. They have been omitted from the table since they were too few in number to adequately represent this category.

Table 6.5

The Motivation, "to Experience the Out-of-Doors Intensely", by Learning Canoeing with a Club

The motivation, to experience the out-of-doors intensely	Method of learning canoeing		Total	
	Did not learn with a club	Did learn with a club		
Not important	12.4	39.3	(36)	15.7
Important	87.6	60.7	(193)	84.3
Total	(201) 100.0%	(28) 100.0%	(229)	100.0%

Corrected chi square = 11.42 1 Degree of freedom $p<.001$
Number of missing observations = 1

clubs (76), which accounts for those belonging to climbing clubs, for example, but not canoe clubs. Of those who had learned canoeing with a club, 60.7% reported being motivated by wanting to experience the out-of-doors intensely, compared to the larger proportion (87.6%) of those who had not learned with a club.

These observations raise the question of whether club membership influences the canoe trippers' motivations and preferences, or if their motivations and preferences affect their desires and decisions to join clubs. Probably both alternatives are partly true. In any event, club members are different from non-members in the ways suggested above. One further association offers some insight into the nature of these differences. That is, club members reported more frequently than non-members that they thought their motivations were complex, as shown in Table 6.6.

Table 6.6

Simplicity or Complexity of Motivations
by Club Membership

Nature of motivations	Club membership		Total	
	Non-member	Member		
Simple	46.9	36.8	(97)	43.5
Neither simple nor complex	27.2	21.1	(56)	25.1
Complex	25.9	42.1	(70)	31.4
Total	(147) 100.0%	(76) 100.0%	(223)	100.0%

Chi square = 6.15 2 Degrees of freedom $p<.05$
Number of missing observations = 7

They stated slightly less frequently than non-members the neutral position that their motivations were "neither simple nor complex". Two tentative explanations for this observation are proposed. First, club membership may expose canoeists to a greater variety of people who enjoy taking canoe trips, and consequently to a greater variety of ideas about what canoe trips could be like. Second, some people may join clubs because canoeing in the absence of a club (on their own, or with friends and family) cannot meet all the needs which recreational canoeing potentially can satisfy.

It would have been reasonable to expect a number of variables to be associated with the sex of the respondent, but very few such associations were observed. One distinction which appeared between the sexes may reflect the different ways in which men and women are brought up in our society. Fewer women than men (39.0% compared to 58.3%) reported being self-taught canoeists (Table 6.7), and more women than men (41.5% compared to 23.5%) had learned to canoe with their families (Table 6.8). Learning with one's family is considerably more secure and less independent than is learning on one's own. This difference is also evident in Table 6.9, which shows that 55.1% of men were attracted to the feature of independence of the canoe party on a wilderness canoe trip, while only 31.7% of women found it appealing. However, there was no significant difference between men and women in how they ranked the role of the canoe as that of enabling the canoe party to be independent. Further, there were no differences between men and women in how they perceived the role of planning, in their attitudes toward potential problems and hardships on trips, and in the minimum conditions they required for their trips.

Table 6.7

Learning to Canoe on One's Own
by Sex of Respondent

Method of learning	Sex		Total	
	Male	Female		
Did not learn by self	41.7	61.0	(103)	45.2
Learned by self	58.3	39.0	(125)	54.8
Total	(187) 100.0%	(41) 100.0%	(228)	100.0%

Corrected chi square = 4.29 1 Degree of freedom p<.04
Number of missing observations = 2

Table 6.8

Learning to Canoe with One's Family by Sex of Respondent

Method of learning	Sex Male	 Female	Total
Did not learn with family	76.5	58.5	(167) 73.2
Learned with family	23.5	41.5	(61) 26.8
Total	(187) 100.0%	(41) 100.0%	(228) 100.0%

Corrected chi square = 4.64 1 Degree of freedom p<.04
Number of missing observations = 2

Table 6.9

Independence of the Canoe Party as an Appealing Feature of Long Wilderness Canoe Trips by Sex of Respondent

The appeal of independence of the canoe party	Sex Male	 Female	Total
Not appealing	44.9	68.3	(111) 49.1
Appealing	55.1	31.7	(115) 50.9
Total	(185) 100.0%	(41) 100.0%	(226) 100.0%

Corrected chi square = 6.46 1 Degree of freedom p<.02
Number of missing observations = 4

Based on these findings, as well as on the observation that only 17.9% of all respondents were women (reported in Chapter Five), the conclusion is suggested that, while there are relatively fewer women who take long wilderness canoe trips, the ones who do are very much like the men who do so with respect to their motivations, preferences, and attitudes.

In summary, the characteristics of respondents did not differentiate among them on the bases of their motivations, preferences, and attitudes regarding canoe tripping, with the major exception of club membership, and the minor exception of sex.

Associations of Expressed Motivations with Other Variables

Generally speaking, few associations between motivations and other variables were observed which would indicate important variations among members of the canoe tripping community. Even when the motivations which were ranked as the most important ones were compared with other variables*, the number of associations which emerged were no more than would be expected to occur by chance. For example, all of the listed motivations (22 in number) were crosstabulated with all of the appealing features of canoe trips (15 in number). Of 330 possible associations, only 23 proved to be significant at the level of .05 or better, which is only 6 more than might have occurred according to the laws of statistical probability. When the ranked motivations (also 22 in number), were crosstabulated with the appealing features, only 11 significant associations resulted.

---

* In all the reported crosstabulations, expressed motivations were used instead of ranked motivations because of the potential loss of validity when respondents were forced to rank their motivations.

The small number of associations was to be expected on the basis that most canoeists expressed a number of motivations, rather than just one or two (Figure 5.4), as well as a variety of motivations. It suggests that motivations tend to be general to the activity of taking wilderness canoe trips, rather than specific to certain ways of conducting trips, certain locations for taking them, specific attitudes about hazards on such trips, and so on. Another way of expressing this is to say that motivations are general while their manifestations are specific.

Despite the apparent generality of motivations, in some cases in which significant associations occurred, these associations were useful in that they shed some light on the precise meanings of the relationships between canoe tripping and the motivations in question. The motivations which were illuminated in this manner included the desires to socialize with friends, "to meet the challenge of physical endurance", and to escape everyday routines.

The motivation, "to socialize with my good friends", was associated positively with five appealing features of canoe trips and negatively with one appealing feature. The positive associations are summarized in Table 6.10. Those canoeists who were motivated by socializing with their friends more frequently than the others reported that they were attracted to the canoe party's being responsible only for itself, the party's independence, the physically active way of life, the feeling that there is no urgency on a canoe trip, and the simplicity of life on such a trip. As an example of these relationships, Table 6.11 illustrates the relatively greater attraction to independence for canoeists motivated by socializing. These associations potentially offer some insight into how long wilderness canoe trips can meet the need to

Table 6.10

Summary of Significance Levels for Associations Between the Motivation, "to Socialize with My Good Friends", and Selected Appealing Features of Long Wilderness Canoe Trips

The canoe party is responsible only for itself	Corrected chi square = 11.80 1 Degree of freedom p<.001
The canoe party is independent	Corrected chi square = 6.90 1 Degree of freedom p<.01
Physical activity becomes a way of life	Corrected chi square = 4.59 1 Degree of freedom p<.04
There is no sense of urgency	Corrected chi square = 3.93 1 Degree of freedom p<.05
Life is simple	Corrected chi square = 3.92 1 Degree of freedom p<.05

Table 6.11

Independence of the Canoe Party as an Appealing Feature of Long Wilderness Canoe Trips by the Motivation, "to Socialize with My Good Friends"

The appeal of independence of the canoe party	The motivation, to socialize with my good friends		Total	
	Not important	Important		
Not appealing	55.4	35.3	(111)	49.3
Appealing	44.6	64.7	(114)	50.7
Total	(157) 100.0%	(68) 100.0%	(225)	100.0%

Corrected chi square = 6.90 1 Degree of freedom p<.01
Number of missing observations = 5

socialize. The feature of independence and that of being responsible only for one's group emphasize the importance of the group and provide the foundation for its cohesion, while the simple life-style and lack of urgency set the scene for getting to know one's companions better. It is not apparent how physical activity fits into this group of appealing features.

Trippers oriented toward socializing with their friends reported less often than other respondents that they were attracted by the lack of other people along wilderness canoe routes. Table 6.12 shows that only 36.8% of trippers motivated by socializing found this feature to be appealing, compared to 60.5% of the other trippers. This association suggests that there might be an orientation of some canoeists toward interrelating with people on wilderness canoe trips which can extend beyond their immediate group to accept the presence of others.

Meeting "the challenge of physical endurance" is a motivation which was related positively to an attraction toward physical activity being a way of life on a canoe trip, and to requiring the presence of portages on long canoe trips (presumably because portages are physically arduous). These associations offered no new insights. However, two other associations emerged which may improve our understanding of that motivation. They are displayed in Tables 6.13 and 6.14. In the first table, it is apparent that canoeists who desired to meet the challenge of physical endurance found that the lack of comforts on a canoe trip was appealing more frequently than did those who were not motivated to meet that challenge (32.5% compared to 19.6%). The second table shows that 30.6% of those who wanted to meet the challenge of endurance reported the desire to include various problems and hardships in long

Table 6.12

The Unlikelihood of Seeing Other People as an Appealing Feature of Canoe Trips by the Motivation, "to Socialize with My Good Friends"

The appeal of it being uncommon to see other people	The motivation, to socialize with my good friends		Total
	Not important	Important	
Not appealing	39.5	63.2	(105) 46.7
Appealing	60.5	36.8	(120) 53.3
Total	(157) 100.0%	(68) 100.0%	(225) 100.0%

Corrected chi square = 9.82 1 Degree of freedom p<.01
Number of missing observations = 5

Table 6.13

The Lack of Accustomed Comforts as an Appealing Feature of Long Wilderness Canoe Trips by the Motivation, "to Meet the Challenge of Physical Endurance"

The appeal of the lack of accustomed comforts	The motivation, to meet the challenge of physical endurance		Total
	Not important	Important	
Not appealing	80.4	67.5	(165) 73.3
Appealing	19.6	32.5	(60) 26.7
Total	(102) 100.0%	(123) 100.0%	(225) 100.0%

Corrected chi square = 4.12 1 Degree of freedom p<.05
Number of missing observations = 5

Table 6.14

Attitudes Toward Potential Problems and Hardships by the Motivation, "to Meet the Challenge of Physical Endurance"

Attitude toward potential problems and hardships*	The motivation, to meet the challenge of physical endurance		Total	
	Not important	Important		
They seem serious at the time, but the seriousness fades in retrospect	29.2	9.9	(40)	18.4
They add to the character of a trip, should they occur	61.5	59.5	(131)	60.4
They are a desirable part of the challenge that I try to include in a long canoe trip	9.4	30.6	(46)	21.2
Total	(96) 100.0%	(121) 100.0%	(217)	100.0%

Chi square = 22.14 2 Degrees of freedom p<.001
Number of missing observations = 4

* Nine respondents from 2 categories were omitted from this table because they were too few in number to represent the categories adequately in this analysis. Four of the respondents had chosen the alternative, "The problems and hardships are to be avoided completely", and 5 of them had chosen the alternative, "They seriously reduce the enjoyment of a trip".

trips, but only 9.4% of those not motivated by the challenge of endurance chose this alternative. Perhaps the appeal of canoe tripping as an activity which permits one to meet the challenge of physical endurance is that the canoe trip involves coping with the problems and hardships which can arise on an extended and isolated expedition, as well as with the lack of accustomed comforts. In other words, coping with problems and deprivation of normal comforts makes the test of one's endurance more severe. This observation suggests a deficiency in one of the questions in the questionnaire. Question 14 asked respondents to rank five possible roles for the canoe, but there was no role specified which could correspond precisely with this sort of orientation toward canoe tripping. An appropriate statement might have modified the first role statement to read, "Travelling by canoe is a tough and challenging way to get from A to B in the North American wilderness".

"To escape the routines of everyday life" was a popular motivation, expressed by 61.1% of respondents (Table 5.26). The routines from which they wanted to escape were not specified, but the associations between this motivation and two appealing features of long wilderness canoe trips suggest what it is about everyday routines that canoeists want to escape. In Table 6.15, it is apparent that 31.9% of those who were motivated to escape routines thought that the lack of accustomed comforts on a trip was appealing, compared to only 18.4% of those not motivated to escape routines. (However, in both groups, a minority were attracted to this feature.)

Table 6.16 shows that respondents who were motivated to escape everyday routines also were attracted more frequently than others to the simplicity of the canoe trip life-style (69.6% and 52.9%, respectively - a difference of 16.7%). Assuming that if one wants to escape some aspect of everyday life, one searches for contrast in an alternative life-style, simplicity of the canoe tripping life-style must contrast with complexity in normal life, and lack of comforts must contrast with the presence of comforts in normal life. These observations support Farina's conception

Table 6.15

The Lack of Accustomed Comforts as an Appealing Feature of Long Wilderness Canoe Trips by the Motivation, "to Escape the Routines of Everyday Life"

The appeal of the lack of accustomed comforts	The motivation, to escape the routines of everyday life		Total	
	Not important	Important		
Not appealing	81.6	68.1	(165)	73.3
Appealing	18.4	31.9	(60)	26.7
Total	(87) 100.0%	(138) 100.0%	(225)	100.0%

Corrected chi square = 4.30   1 Degree of freedom   p<.04
Number of missing observations = 5

Table 6.16

The Simplicity of Life-Style as an Appealing Feature of Long Wilderness Canoe Trips by the Motivation, "to Escape the Routines of Everyday Life"

The appeal of the simplicity of life	The motivation, to escape the routines of everyday life		Total	
	Not important	Important		
Not appealing	47.1	30.4	(83)	36.9
Appealing	52.9	69.6	(142)	63.1
Total	(87) 100.0%	(138) 100.0%	(225)	100.0%

Corrected chi square = 5.69   1 Degree of freedom   p<.02
Number of missing observations = 5

of some types of leisure as providing means of challenging lower level needs (as discussed in Chapter Two).

In this section, associations between selected motivations and some other variables were discussed. While these relationships fell within the significance level of .05 specified prior to the analysis, none of them was particularly strong or dramatic, and interpretations rested on an examination of at least two related tables. Conditions were specified which facilitated the social interaction desired by some canoeists on long wilderness trips; two features of canoe trips which may make them attractive to people motivated to meet the challenge of physical endurance were discovered; and aspects of everyday routines which some canoeists strive to escape by taking canoe trips were suggested.

Associations Between Trip Locations and Other Variables

The locations of trips were classified into four categories of "remoteness", as discussed in Chapter Five: Barrens, remote northern forest, semi-remote northern forest, and well-used locations. This classification system was used for two variables - the location of the recalled trip and the location of the most remote trip taken. There was only one motivation, the desire "to see wildlife", which was associated with both of these variables. The association between the most remote location and the desire to see wildlife is shown in Table 6.17. (The table using the recalled location was almost identical.) This table shows that 67.1% of canoeists who were motivated by the desire to see wildlife had taken their most remote trip in a Barrens location, compared to only 36.4% of trippers not motivated to see wildlife. On the other hand, those who did not feel it was important for them to see

Table 6.17

Most Remote Location by the Motivation, "to See Wildlife"

Most remote location	The motivation, to see wildlife		Total	
	Not important	Important		
Barrens	36.4	67.1	(132)	59.5
Remote northern forest	16.4	11.4	(28)	12.6
Semi-remote northern forest	18.2	12.6	(31)	14.0
Well-used locations	29.1	9.0	(31)	14.0
Total	(55) 100.0%	(167) 100.0%	(222)	100.0%

Chi square = 10.29 3 Degrees of freedom $p<.02$
Number of missing observations = 8

wildlife more frequently had taken their most remote trips in the other locations. This was particularly evident for well-used locations.

In all of the crosstabulations of most remote location and recalled location with other variables, the two tables reported above were anomalies. This is because Barrens locations were clearly distinguished from the others, and because the numbers of respondents in the cells for the other locations showed a trend to increase or decrease with decreasing remoteness. In all of the other tables, no trend was discernible, which made interpretation difficult or impossible. An example of such a table is Table 6.18, which crosstabulates the location of the recalled trip with the importance of the motivation, "for love of adventure". In this table, there is no difference between people motivated and not

Table 6.18

Location of the Recalled Trip by the Motivation, "For Love of Adventure"

Recalled location	The motivation, for love of adventure Not important	 Important	Total	
Barrens	56.4	57.9	(119)	57.5
Remote northern forest	1.8	14.5	(23)	11.1
Semi-remote northern forest	14.5	14.5	(30)	14.5
Well-used locations	27.3	13.2	(35)	16.9
Total	(55) 100.0%	(152) 100.0%	(207)	100.0%

Chi square = 10.60   3 Degrees of freedom   p<.02
Number of missing observations = 23

motivated by love of adventure for the two categories, "Barrens" and "semi-remote northern forest". But there are differences between respondents whose recalled trips were in the other two locations. The canoeists who reported that their love of adventure was an important motivation more frequently recalled a remote northern forest location than those to whom love of adventure was not important. The opposite was true for the well-used locations.

This type of association cannot be explained, and may in fact have arisen due to chance, rather than because the association between the variables actually exists. However, three other tables were of this type. Several possible conclusions can be derived from these observations. Perhaps the classification system for trip locations was ill-conceived and/or inaccurate. There may be some trips in other locations which give the same subjective feeling of remoteness as Barrens locations to many canoeists. Alternatively, some Barrens locations may not "feel" very remote. In addition, as stated in Chapter Five, the assignment of trips to certain categories was not based on complete information. Another possible conclusion is that the relative remoteness of canoeists' trips is unrelated in any systematic way with their motivations. Intuition suggests that this conclusion is unacceptable. People in the canoe tripping community commonly measure the relative remoteness of trips by features of trip locations which were used as a basis for this classification system, such as difficulty of access, duration of trip, settlements en route, and so on. It may be that while differences exist which are of subjective importance to canoeists, the differences which can be discerned within the realm of possible locations for long wilderness canoe trips are too minor to justify the use of a system for classifying them according to relative remoteness.

Conclusion

Little evidence was found in this analysis which would suggest that there are strong or systematic variations among members of the wilderness canoe tripping community. Few differences among respondents emerged on the bases of their characteristics, their amounts of experience, the locations of their trips, their relative commitment to canoe tripping, their perceptions of the role of planning and the seriousness of potential hazards, their perceptions of the canoe trip experience, their motivations, or the features of canoe trips which appealed to them.

Some differences were noted between club members and those who did not belong to clubs, and women were different from men in one minor respect. Some associations provided insight into the nature of several motivations, including "to socialize with my good friends", "to meet the challenge of physical endurance", and "to escape routine". The adequacy of the classification system for relative remoteness was questioned. In summary, the activity of canoe tripping appears to have a general appeal for a specific group of recreationists who are much more like each other than different from one another.

CHAPTER SEVEN

REVIEW OF THE STUDY AND SUMMARY AND IMPLICATIONS OF ITS FINDINGS

Introduction

Natural resources are attributes of the physical environment which people identify as being of value. The value attached to a resource depends on its physical characteristics in addition to the needs and wants which people perceive the resource to be capable of meeting. In order to understand human use of environment, therefore, it is important to know the goals which people are motivated to achieve through activities and experiences in the environment. This type of understanding is of concern to the human geographer. Wilderness is a natural resource. The geographer studying wilderness recreation must consider motivation to be one of the aspects of recreation behaviour which requires investigation. The research presented in the preceding pages was intended to provide a contribution toward the understanding of motivation for wilderness recreation behaviour.

This concluding chapter has several purposes. First, a review of how the study was conducted is provided. The complementary use of the guided interview and the mail questionnaire is highlighted, particularly with respect to the exploratory nature of the study. Next, the findings are summarized in relation to the research questions which guided the inquiry into the motivations of wilderness canoe trippers. In the third section, the meaning of the findings is discussed in general terms. Lastly, practical implications for recreation planners and managers and implications for research are suggested.

A Review of How the Study Was Conducted

A review of academic literature revealed that there was a gap in the research done on wilderness recreation which a study of motivations potentially could fill. Previous research had been concerned mainly with recreationists' perceptual capacity, which was assessed primarily with attitudinal measures. This study proposed to examine the motivations of a group of wilderness recreationists, partly because motivations are related more directly than attitudes with behaviour, and partly because an understanding of peoples' motivations for experiences in particular environments improves our understanding of how people interrelate with environment. Wilderness canoe trippers were selected as appropriate subjects for this study on the basis that they expend considerable effort to engage in the activity of canoe tripping in a relatively "pure" wilderness, the "northern wilderness". Because very little information about the motivations of wilderness recreationists was available, the study adopted an exploratory approach. It was designed in two stages. The first stage consisted of guided interviews with 15 canoe trippers. The purpose of these interviews was to gain as much information as possible about the meaning of the canoe tripping experience for each of these people. The interviews were tape recorded, transcribed, and analyzed by means of detailed content analyses as well as interpretive summaries.

The findings of these two analyses provided information which was then organized into questions for a mail questionnaire, the purpose of which was to specify and standardize questions about canoe tripping to be asked of a large number of canoeists. The advantage of obtaining standardized and comparable information from a large number of people was that, with a good response, generalizations could then be made about the community of wilderness canoeists. After pre-testing, the questionnaire was mailed to 327 potential respondents in North America and Europe, whose names and addresses had been obtained from a variety of sources. The response rate was 74.9%. In addition, 19.2% of respondents sent unsolicited letters providing more information. The information obtained from the questionnaires was analyzed according to simple frequencies of responses, and also according to crosstabulations of pairs of variables.

The material from the interviews served its purpose fairly well - it provided a wealth of information about the meaning of the canoe tripping experience to 15 individuals. However, the findings from these interviews were not comparable, nor could they be generalized to the larger community of canoe trippers. The questionnaire also served its purpose quite well in that it provided a basis for discovering the motivations, perceptions, and attitudes of a larger number of canoeists and permitted generalizations to be made about the canoe tripping community. However, it fragmented the canoe tripping experience, rather than capturing its unified meaning to the individual tripper. Because of their respective strengths and limitations, these two techniques were considered to be complementary, and very useful for an exploratory study. The interviews emphasized the uniqueness and richness of meaning in an individual's experience, while the questionnaire emphasized those characteristics which represent members of the larger group of wilderness canoeists.

Summary of the Findings

1. Characteristics of People Who Take Long Wilderness Canoe Trips

The first research question had two parts: the first concerned the characteristics of respondents, and the second concerned their past experience with camping and canoeing. About half of the respondents were Canadians, while slightly fewer were from the U.S.A., and only 10 were Europeans. Although reported ages ranged widely, most respondents (61.8%) were between the ages of 25 and 44 years. A large majority (82.1%) were men. A small majority (59.3%) were married, but only 37.7% reported having dependent children at the time of their recalled trips. About seventy-five per cent of respondents held university degrees. The largest proportion (57.2%) were employed in professional occupations, and 12.1% of the survey group reported their occupations to be related to outdoor education and recreation. Relatively few respondents (33.5%) were members of outdoor clubs.

There was some variation between Canadians and Americans in the characteristics of sex, occupation, parenthood, and club membership. These variations pointed to bias in the survey frame (particularly regarding sex and club membership), and also suggested that some aspects of life-style which influence the taking of long canoe trips might be different between the two countries.

The largest proportion of respondents to the survey were relatively experienced with canoeing and camping. Respondents tended to have more years of experience with camping than with canoeing. Their camping experience had been obtained mainly in smaller campgrounds and in the backcountry. For most of them, their canoeing skills had been learned in informal ways - with their friends and families or by themselves. Most of the respondents (75.2%) had taken two or more long wilderness canoe trips, and 86.5% had taken at least one trip that had lasted three weeks or longer. According to a scale of relative remoteness for trip locations, most of the canoeists (59.6%) had taken at least one trip in the most remote location, the Barrens; while 65.4% had taken long canoe trips in more than one type of wilderness location. These findings about the respondents to the survey show that they form a relatively homogeneous group with respect to their characteristics.

In general, the characteristics of respondents, their canoeing and camping experience, and their trip locations were not linked with any systematic variations among respondents. Exceptions were the characteristics of club membership and sex. It appeared that club members were less inclined than non-members toward arduous conditions for trips, and that they felt more frequently than the others that their motivations were complex. Findings about differences between the sexes were far from conclusive, but suggested that women might be less attracted to the appeal of independence in canoe tripping. The locations for trips, classified according to the scale of remoteness, did not distinguish systematically among respondents, suggesting flaws in the assignment of trip locations to categories, too great a similarity among the locations to warrant subcategorization, or the lack of meaningful relationships between remoteness and other variables.

2. The Features of Wilderness Canoeing Which Distinguish Its Appeal as a Recreational Activity

This research question focussed on the specific features of the northern wilderness environment which were attractive to wilderness canoe trippers, and on the specific benefits accruing from a long wilderness canoe trip. Those features of the northern wilderness were not assessed directly, but through the use of indicators which were logically and/or intuitively related to them. Almost all respondents (91.6%, excluding those whose most remote trip location had been a "well-used" location) recalled their most remote trip for the questionnaire. They had been instructed to recall "either the [trip] of which you have the most pleasant memories, or your most recent trip". Nevertheless, remoteness was one feature of the northern wilderness which strongly and favourably influenced respondents' memories. Some of the minimum conditions which respondents specified had to be present before they would consider a wilderness canoe trip also indicated certain features of the northern wilderness which were attractive to them. These included, for the majority of respondents, the presence of few or no other people, a new and different location for the trip, and rapids en route. About half (49.8%) of the respondents required beautiful scenery for their chosen trip location. Large minorities also required that they travel with their good friends (which suggested that the social environment is an important part of a wilderness canoe trip for these people), and that they be reliant on themselves for emergency rescue.

In addition, the appealing features of long wilderness canoe trips which were identified by respondents were indicators of the behavioural environment of people canoeing in the northern wilderness. The four most frequently mentioned features were very closely interrelated with one another. They were that, "Activities become attuned to land and weather", "Physical activity becomes a way of life", a "Sense of timelessness develops", and "Life is simple".

The benefits from canoe tripping which were claimed by respondents were diverse, with relatively small numbers of respondents reporting each one. There were some benefits which more than half of the respondents claiming them thought could be provided only by wilderness canoeing. These were the benefits which involved gaining geographic insight, self-improvement (through learning), and mental and emotional health. These benefits were related to the intensity and duration of canoe trips in the northern wilderness. The importance of the role of time on such canoe trips was indicated in additional notations made by many respondents.

3. Characteristics of a Long Canoe Trip

This research question consisted of four sub-questions which are listed below:

a) Does the experience go beyond that of paddling a canoe?
b) If so, what sorts of experiences does it provide for people?
c) What is the perceived role of the canoe in a long trip?
d) What potential hazards do canoeists perceive to exist on a long trip? How hazardous are they perceived to be? When and how are they handled?

Evidently, the canoe trip experience does go beyond that of paddling a canoe. The appealing features of canoe trips mentioned earlier pointed toward the importance of the wilderness life-style to canoe trippers. The experience was said to have strong impact on trippers because there were many aspects of experience which described respondents' trips. That is, large majorities of respondents (80.6% and higher in every case) agreed that their trips were adventurous, aesthetic, emotional, physical, and social experiences. In addition, the emotions which trippers reported feeling when their trips had ended supported the notion of a canoe trip as a varied experience with high impact. The feeling of despondency or emotional let-down at the conclusion of trips was very common, and extreme positive emotions (like exhilaration) were expressed much more frequently than moderate positive emotions (like contentment). Further, emotions very often were mixed and relief was often expressed, suggesting the existence of tension on the trip between positive and negative feelings.

Organizational features of trips tended to permit trippers to enrich the experience of travelling in a canoe by allowing a wide variety of other activities to take place. Furthermore, there were preferences for the democratic conduct of trips, including group decision-making and flexible and informal organization.

The role of the canoe which was perceived most commonly to be its most important one was that of enabling the trippers to be part of the wilderness, and the second most important role was that of enabling the canoe party to be independent. The relative importance of these two roles indicated that the canoe has symbolic value (over and above its practical value), and that canoeists value the wilderness life-style, as well as the independence occasioned by remoteness and the lack of other people on a wilderness canoe route.

A number of hazards were perceived as being serious to some degree by the majority of respondents. More specifically, the hazards of cold water, rapids, unskilled or careless companions, and making poor judgments were thought to be very serious by more than fifty per cent of the trippers. The large majority (78.4%), however, had very positive attitudes toward the occurrence of problems and hardships on canoe trips, and another 17.6% held the neutral attitude that problems may seem serious at the time, but are less so in retrospect. The reason for this seeming inconsistency is suggested by the observation that many respondents reported great pleasure with their trips as well as relief with their safe arrivals, and confirmed perhaps by their attitudes about

6

planning. Large proportions of canoeists (77.8% and higher in every case) agreed that the purposes of planning were to enable flexibility and resourcefulness, to promote security, and to enhance the feeling of self-reliance; but only 56.3% agreed that planning was the same thing as safety, and only 16.4% thought that the purpose of planning was to remove every element of the unknown. In other words, it is likely that canoeists feel that planning enables them to be independent and secure without removing adventurous aspects of the trip arising from elements of danger and of the unknown. These elements of danger and the unknown arise from potential hazards of the type that require precautionary actions to be taken mainly or in part during trips. Examples of this type of hazard are rapids, injury from portaging or lining, camping accidents, cold water, and poor judgment.

The most frequently mentioned group of reasons for respondents' preferred number of canoes in a wilderness canoeing party were safety reasons (mentioned by 71.5% of respondents). Having a larger number of canoes in a party improves the capability of the group for resourcefulness and flexibility in dealing with problems which might arise. Many logistical problems call for a lower number of canoes than safety might require, but only 44.3% of respondents mentioned this sort of reason.

4. The Motivations for Canoe Tripping

The sub-questions for this research question are listed below:

a) How easy is it for canoeists to identify their motivations?
b) Do they consciously consider their motivations while planning and executing a trip?
c) What motivations do canoeists identify as being important?
d) Is there a motivational sequence to their trips?
e) How committed are they to taking long canoe trips?
f) Are motivations associated with other variables, including:
    i) characteristics of respondents,
    ii) the appeal of the northern wilderness,

iii) the style of preparing for trips and conducting them, and
iv) their perceptions of hazards and problems potentially encountered on a trip?

A large majority of respondents (84.5%) reported that the question asking them to identify their motivations was not difficult, and almost all respondents (95.2%) thought that the question had at least some relevance to their experience of canoe tripping. Very few (11.9%) reported never having thought about their motivations before. For the largest proportions of respondents, their motivations were on their minds only occasionally while planning a trip (51.5%) and while taking the trip (52.4%). It was more common for motivations to be uppermost in the canoeists' minds while planning their trips (26.4%) than while taking them (13.8%).

Almost all of the respondents identified five or more motivations which they considered to be important to their canoe tripping. The most frequently mentioned motivation was "to experience the out-of-doors intensely". Other popular motivations fell into groups, which included motivations associated with the desire to gain geographic insight, those relating to having a unique experience, and self-testing motivations. When motivations were ranked, two of them were much more frequently ranked and received a much higher composite ranking score than the others. These were "to experience the out-of-doors intensely" and "for love of adventure". Motivations related to gaining geographic insight and to having a unique experience were ranked higher in general than self-testing motivations. There was not enough information obtained from the questionnaire to determine if successive trips had a motivational sequence.

The largest group of trippers (28.1%) planned to take long canoe trips on a regular basis. Almost as many (27.2%) were very committed trippers, reporting that their trips were a major part of their lives. The remainder were not committed to canoe tripping on a regular basis.

In general, the expressed motivations did not distinguish systematically among respondents. However, a few motivations were each associated with a number of other variables in ways which were interpreted as improving our understanding of the nature of those motivations. Trippers who were motivated by the opportunity to socialize with friends on a canoe trip were attracted more frequently than others to features of long trips which promote social cohesion and emphasize the importance of the group. They also expressed acceptance of other people along the canoe route more frequently than others, indicating a general orientation of these people toward interrelating with others. Canoeists who were motivated "to meet the challenge of physical endurance" were attracted to the lack of comforts on canoe trips, and more frequently than others reported the desire to include problems and hardships on their trips, both of which presumably would increase the degree of challenge on a trip. The people who desired "to escape the routines of everyday life" were attracted more frequently than others to the simplicity of life and to the lack of comforts on a canoe trip. It is likely that complexity and comforts in their normal lives create the routines they strive to escape.

The general inability of the information obtained about canoe trippers to distinguish among them in any systematic way was interpreted to mean that the group of wilderness canoeists is a relatively homogeneous group. In addition, it is likely that wilderness canoeing holds a very general appeal for this very specific community of recreationists.

What the Findings Mean: Consistency and Meaning in the Survey Results

The findings from each interview were rich in individuality. To a lesser extent, the information contained in each questionnaire represented individual personalities. In Chapter Five, Doug and Joanne emerged as canoe trippers who were distinct from one another in their attitudes, preferences, experience, and motivations. The consistency of responses in their respective questionnaires supported the assumption that their responses were meaningful, and so provided one means of assessing the validity of the findings.

More important from the point of view of being able to use the research findings to make inferences about the population of wilderness canoe trippers was the discovery that, in general, the findings based on information from all respondents to the survey were very consistent. A major finding was that "to experience the out-of-doors intensely" was the motivation mentioned most frequently by respondents and ranked highest by them. The most important role of the canoe for canoe trippers was enabling the tripper to be part of the wilderness. That is, the canoe is the medium whereby the tripper can have an intense out-of-doors experience. The features of the trip which contribute to its intensity are those four features which canoeists found to be most appealing about canoe trips: "Activities are attuned to land and weather", "Physical activity becomes a way of life", a "Sense of timelessness develops", and "Life is simple". Other motivations which were expressed frequently by canoeists were related to the desire to learn first-hand about the northern wilderness in an intense way. In addition, the very large proportion of respondents with university educations is consistent with their being intellectually curious about the northern wilderness environment.

There are few people, and more specifically, few wilderness recreationists, who take part in wilderness experiences which are as intense as long canoe trips; therefore, the desire for such an experience may contain elements of a desire to do something different which sets one apart from other people. This desire characterized other motivations ranked high by many respondents, namely, "for love of adventure" and "to escape routine".

A further consistency in the responses concerned the motivation, "for love of adventure", which was expressed frequently by respondents and ranked second most important by them. During the interview analysis, "adventure" was defined as "a totally involving experience which [is] very different from one's normal life and which [lacks] the securities of home" (page 58). Almost all of the respondents agreed that their trips were adventurous experiences. A canoe trip is a specialized type of adventure, distinguished by the environment in which it occurs, but characterized - as are all adventures - by intensity, uniqueness in lifestyle, and the absence of normal securities. According to the first two characteristics, love of adventure is seen to be related to the motivation of experiencing the out-of-doors intensely. The last characteristic may be related to the self-testing motivations described in Chapter Five. Although potential hazards are anticipated with advance planning, some problems are expected to occur during a trip because planning does not remove every element of the unknown. Instead, planning enables one to be flexible and resourceful, and to deal with some problems during the trip in the absence of "normal securities". For most respondents, problems which may arise contribute to the character of a trip - or are even desirable features of a trip - and therefore help to create the adventure of it.

Another consistency among responses was to be seen in the preferences for relatively informal organization. Most trippers learned their canoeing skills in informal ways; the bulk of their camping experience has been in primitive and backcountry camping spots; the majority of trippers are not affiliated with outdoor clubs; and most stated preferences for informal and democratic organization of trips. These preferences are consistent with the perception of wilderness as a place where one can be independent and self-reliant, and where one can have a personal adventure, an intense and powerful experience which is somehow suited to the environment in which it occurs.

Finally, another way in which canoe trippers are alike is that they each tend to be influenced by a considerable variety of motivations, and to find the canoe trip experience to be a multi-faceted one. In the motivations for canoe tripping which are important to people, there does not appear to be much of the element of escape from everyday life. There is much more of the element of attraction to the trip experience. In other words, "pull" factors are much more influential than "push" factors in motivations for wilderness canoeing. The desires to "experience the out-of-doors intensely", to gain intimate knowledge of a different type of environment, to have an adventure, and to test one's abilities to meet the challenges which present themselves are all motivations which attract canoe trippers to the northern wilderness.

With these consistencies apparent from the descriptive analysis, it was not surprising to learn from the crosstabulations of variables that there were few systematic differences observed among the canoe trippers. Despite the evidence of individuality in each interview and questionnaire, canoe trippers form a relatively homogeneous group in their attitudes, preferences, and motivations. Likely, while on a trip or while discussing trips with other canoeists, canoe trippers would observe the differences between their parties and other parties in the styles in which trips are organized and conducted. These differences are more likely to be the superficial manifestations of very similar motivations than fundamental differences in philosophy and psychology of wilderness canoeing.

Practical Implications of the Study

The group of recreationists who take long wilderness canoe trips is very small in number, relative to other types of recreationists. It is difficult to study groups such as this because their members are individualistic and unorganized, in addition to being few in number. Probably, canoeists who can be reached through obvious sources such as clubs would not represent accurately the attitudes, preferences, and motivations of this particular group. Yet it is important for the recreation planner to know about "fringe" groups such as this one because findings about them constitute a baseline of sorts for wilderness recreation.

While it cannot be said that variations between this group and other wilderness recreation groups are differences in degree (rather than kind), these canoeists are utilizing the "purest" of North American wildernesses in a recreational way. The fact that they are organizing their trips, planning for life support, and choosing their own routes is not because of the absence of facilities but because they want to do these things for themselves and to be self-reliant and adventurous. It has already been mentioned (see "Wilderness Recreation Research" in Chapter Two) that wilderness recreationists tend to select sites for themselves which they think will meet their expectations for the desired experiences. To supply services and facilities for the use of wilderness canoe trippers in areas currently being used by them would probably result in the attraction to these locations of different people, with different expectations for the experience, and possibly with different motivations.

The activity of wilderness canoe tripping is becoming more popular, and locations where, a few years ago, the canoe tripper could have expected to meet no other people or only a few are declining in number. Examples are the South Nahanni River, where it is now virtually impossible to meet no-one else, and the Coppermine River, on which several rafting companies offer trips and which was well-publicized by Prince Andrew's trip in 1977. Ecologists argue that tracts of wilderness should be preserved untouched in order to provide a baseline with which to compare areas used by people. In the same way, students of recreation behaviour should insist that there remain examples of recreation behaviour uncomplicated or unshaped by recreational planning. That is, some wilderness areas should be zoned to be exempt from management and development. Such a policy could conflict potentially with a need which is perceived by some interests (particularly federal, provincial, and territorial governments in Canada) to protect a number of rivers from hydroelectric, industrial, or agricultural abuse through the creation of a Canadian Heritage Rivers system (Hooper, 1979). This system would involve the designation of specific rivers for protection and the establishment of management strategies for each one. This potential conflict may create a quandary for canoe trippers, and possibly for recreation planners, in the near future.

Another practical implication of the findings of this study is that motivational studies might provide useful background information for recreation managers to complement information from carrying capacity research which likely constitutes the bulk of recreation research to which managers are exposed. In Chapter Two, studies were named which discovered that U.S. Forest Service managers did not perceive accurately the intentions and attitudes of recreationists. This problem potentially could be relieved by providing managers with the sort of information contained in this study, which is oriented toward improving the understanding of recreation behaviour by describing recreationists, rather than oriented toward recreationists' reactions concerning elements of the recreational environment which the manager is expected to be able to control. The end result could be the management of recreation areas which more closely meets the expectations of recreationists with fewer conflicts between themselves and managers.

Implications of the Study for Research

When an exploratory study is undertaken, it is assumed that one of its purposes will be to reveal directions for further research. One of the implications of this study for further behavioural research is that the method used, a two-stage design beginning with in-depth interviews, is useful for improving the chances that the findings of the second stage will be meaningful. In research areas which are new, the in-depth interview provides a means whereby the researcher can relate attributes which are characteristic of the topic under study to theories and concepts which come from various disciplines and which are universally applicable to human behaviour. Without this specific sort of information which can be related to more general concepts, researchers must assume the generality of those concepts. In addition, their understanding of the topic under investigation is much less precise than it could be.

Unfortunately, the order in which recreation research has been carried out has been the reverse of the appropriate order. Motivation research should have been done before carrying capacity studies were done, because attitudes and perceptions of recreationists concerning carrying capacity issues are influenced to a considerable degree by their motivations and their expectations for their trips. A prior understanding of the motivations of recreationists using different types of wilderness areas would have placed the findings of carrying capacity research into the broader framework of a system of wilderness areas meeting different needs for the people using them.

At this time, motivation research in recreation can be used to obtain information about recreationists using different types of areas over a period of time in order to provide us with knowledge of how management policies and techniques affect the people who use planned and managed areas. As use of all recreation areas increases, and as the society from where recreationists come changes, inevitably, there will be changes in motivations and expectations of recreationists. Effective planning and management requires research which will monitor these changes and relate them to the use of different environments. Keeping track of these changes would also provide one form of information to be used in the zoning of recreation areas in order to accommodate the needs of all potential recreation groups in our complex society.

The proposal above implies the use of comparative studies of recreationists seeking different sorts of experiences. For example, the findings about the group investigated in this study could be compared with what might be learned about people who take guided trips in similar areas. The subjective feelings of remoteness among people taking trips in different types of areas could be compared to test the assumption that the northern wilderness is somehow "purer" than others. For the benefit of those who might wish to use some of the same questions asked in this study in a comparative study, a few improvements to the questionnaire are recommended in Appendix 12.

Finally, while it is possible that this study could be refined further, to do so would not necessarily produce results which were more meaningful or more useful. A more rigorous quantitative analysis of the type of information obtained by the interviews and questionnaire would be inappropriate because this type of information is rather imprecise and non-specific. Findings would be misleading. Further, as already mentioned in Chapters Three and Four, a few respondents expressed the belief that "analysis does not lead necessarily to understanding". This warning needs to be observed by those researching human behaviour, especially by use of a survey (or other standardized) method. The information gathering techniques and analytical techniques used must preserve meaning in the information analyzed, and the interpretations must take into account the limitations of the information and the analysis.

BIBLIOGRAPHY

Wilderness Recreation Literature

Bultena, Gordon L. and Marvin J. Taves. 1961. Changing images and forestry policy. Journal of Forestry 59(3):167-171.

Carbyn, Lou N. and D. Patriquin. 1976. Description of the wildlife component for impact assessment of three potential campsite locations in Nahanni National Park, Northwest Territories. Prepared for Parks Canada by the Canadian Wildlife Service. 187p.

Catton, William R., Jr. 1969. Motivations of wilderness users. Pulp and Paper Magazine of Canada 19(December):121-126.

Driver, Beverly L. 1975. Quantification of outdoor recreationists' preferences. In van der Smissen, Betty and Judy Myers (eds.) Research: Camping and Environmental Education. HPER Series 11: 165-187.

________________ and Perry J. Brown. 1975. A sociopsychological definition of recreation demand, with implications for recreation and resource planning. In Assessing Demand for Outdoor Recreation. National Research Council, Committee on Assessment; U.S. Department of the Interior, Bureau of Outdoor Recreation; National Academy of Science. Pp. 64-88.

________________ and Richard C. Knopf. 1977. Personality, outdoor recreation, and expected consequences. Environment and Behavior 9(2):169-193.

________________ and S. Ross Tocher. 1970. Toward a behavioral interpretation of recreational engagements, with implication for planning. In Driver, Beverly L. (ed.) Elements of Outdoor Recreation Planning. Ann Arbor, Michigan: University of Michigan Press. Pp. 9-31.

Emerson, Richard M. 1968. Games: rules, outcomes, and motivation. AAAS Symposium: Psychology and Sociology of Sport. (Mimeographed.) 14p.

Hendee, John C. 1967. Recreation clientele - the attributes of recreationists preferring different management agencies, car campgrounds or wilderness in the Pacific Northwest. Unpublished Ph.D. Dissertation, University of Washington. 244p.

Hendee, John C.; William R. Catton, Jr.; L.D. Marlow; and C. Frank Brockman. 1968. Wilderness users in the Pacific Northwest - their characteristics, values, and management preferences. U.S.D.A. Forest Service Research Paper PNW-61. 92p.

Hendee, John C. and Robert W. Harris. 1970. Foresters' perception of wilderness-user attitudes and preferences. Journal of Forestry 68(12):759-762.

Johnson, Phil. 1976. Recreation - for what benefits? Forestry Research (September):6-8.

Lucas, Robert C. 1965. Wilderness perception and use: the example of Boundary Waters Canoe Area. In Burton, Ian and Robert W. Kates (eds.) Readings in Resource Management and Conservation. Chicago: University of Chicago Press. Pp. 363-374.

______________ 1974. Forest service wilderness research in the Rockies - what we've learned so far. Western Wildlands (Spring): 5-12.

Merriam, L.C. and R.B. Ammons. 1968. Wilderness users and management in three Montana areas. Journal of Forestry 66(5):390-395.

____________ and Timothy B. Knopp. 1976. Meeting the wilderness needs of the many. Western Wildlands (Spring):17-22.

Peterson, George L. 1974. A comparison of the sentiments and perceptions of wilderness managers and canoeists in the BWCA. Journal of Leisure Research 6(3):194-206.

Spurr, Stephen H. 1966. Wilderness management. The Horace M. Albright Conservation Lectureship 6. Berkeley, California: University of California, School of Forestry. 17p.

Stankey, George H. 1972. A strategy for the definition and management of wilderness quality. In Krutilla, John V. (ed.) Natural Environments. Baltimore: John Hopkins University Press. Pp. 88-115.

________________ 1973. Visitor perception of wilderness recreation carrying capacity. U.S.D.A. Forest Service Research Paper INT-142. 61p.

Wildland Research Center. 1963. Wilderness and recreation - a report on resources, values, and problems. U.S. Outdoor Recreation Resources Review Commission, Study Report No. 3. 352p.

Methodological Literature in Outdoor Recreation

Barkham, J.P. 1973. Recreational carrying capacity: a problem of perception. Area 5(3):218-222.

Brotherton, D.I. 1973. The concept of carrying capacity of countryside recreation areas. Recreation News Supplement (July):6-11.

Brown, Perry J.; Allen Dyer; and Ross Whalley. 1973. Recreation research - so what? Journal of Leisure Research 5(1):16-24.

Burdge, Rabel J. and Donald R. Field. 1972. Methodological perspectives for the study of outdoor recreation. Journal of Leisure Research 4(1):63-72.

Clawson, Marion and Jack L. Knetsch. 1966. Economics of Outdoor Recreation. Baltimore: John Hopkins University Press. 328p.

Heberlein, Thomas A. 1973. Social psychological assumptions of user attitude surveys: the case of the wildernism scale. Journal of Leisure Research 5(3):18-33.

Jutenville, Alan. 1971. A test of differences between wilderness recreation party leaders and party members. Journal of Leisure Research 3(2):116-119.

Lucas, Robert C. and Jerry L. Oltman. 1971. Survey sampling wilderness visitors. Journal of Leisure Research 3(1):28-43.

Mercer, David. 1971. The role of perception in the recreation experience: a review and discussion. Journal of Leisure Research 3(4):261-276.

____________ 1973. The concept of recreational need. Journal of Leisure Research 5(1):37-50.

Peterson, George L. and David W. Lime. 1973. Two sources of bias in the measurement of human response to the wilderness environment. Journal of Leisure Research 5(2):66-73.

Literature on Personality in Environment

Barker, Mary and Ian Burton. 1969. Differential response to stress in natural and social environments: an application of a modified Rosenzweig Picture-Frustration Test. Natural Hazards Working Paper No. 5. Toronto: University of Toronto. 19p.

Barrows, Harlan. 1923. Geography as human ecology. Annals of the Association of American Geographers 13(1):1-14.

Burton, Ian; Robert Kates; and Gilbert White. 1968. The human ecology of extreme geophysical events. Natural Hazards Working Paper No. 1. Toronto: University of Toronto. 33p.

Kates, Robert. 1970. Natural hazard in human ecological perspective: hypotheses and models. Natural Hazards Working Paper No. 14. Chicago: University of Chicago. 27p.

Keisler, Charles A.; Barry E. Collins; and Norman Miller. 1969. Attitude Change. New York: John Wiley & Sons, Inc. 386p.

McKechnie, George E. 1970. Measuring environmental dispositions with the Environmental Response Inventory. EDRA Two, Proceedings of the Second Annual Environmental Design Research Association Conference, Pittsburgh, Pennsylvania. Pp. 320-326.

O'Riordan, Timothy. 1971. Perspectives on Resource Management. Campbell, California: Academy Press. 183p.

________________ 1973. Some reflections on environmental attitudes and environmental behaviour. Area 5(1):17-21.

Saarinen, Thomas F. 1966. Perception of the drought hazard of the Great Plains. Department of Geography Research Paper No. 106. Chicago: University of Chicago. 183p.

________________ 1976. Environmental Planning: Perception and Behavior. Boston: Houghton Mifflin Company. 262p.

Sims, John H. and Duane D. Baumann. 1974. The tornado threat: coping styles of the north and south. In Sims, John H. and Duane D. Baumann (eds.) Human Behavior and the Environment. Chicago: Maaroufa Press. Pp. 108-123.

____________ 1976. Professional bias and water re-use. Economic Geography 52(1):1-10.

Sonnenfeld, Joseph. 1969. Personality and behavior in environment. Proceedings of the Association of American Geographers 1:136-140.

________________ 1970. Behavioral dimensions of cultural geography. Paper prepared for Colloquium on New Departures in Theoretical Cultural Geography: 66th Annual Meeting of the Association of American Geographers. (Mimeographed.)

________________ 1971. Monadic and dyadic approaches to the study of behavior in environment. Proceedings of the Association of American Geographers 3:165-171.

________________ 1972. Geography, perception, and the behavioral environment. In English, Paul W. and Robert C. Mayfield (eds.) Man, Space, and Environment. New York: Oxford University Press. Pp. 244-251.

White, Gilbert F. 1945. Human adjustment to floods. Department of Geography Research Paper No. 29. Chicago: University of Chicago. 225p.

Sociological and Psychological Literature

Bernstein, Arthur. 1972. Wilderness as a therapeutic behavior setting. Therapeutic Recreation Journal 6(4):160-161.

Klausner, Samuel. 1967. Sport parachuting. In Slovenko, Ralph and James Knight (eds.) Motivations in Play, Games and Sports. Springfield, Illinois: Charles C. Thomas. Pp. 670-694.

Maslow, Abraham. 1970. Motivation and Personality. New York: Harper and Row, Publishers, Inc. 369p.

Scott, Neil R. 1974. Toward a psychology of wilderness experience. Natural Resources Journal 14(April):231-237.

Smith, Donna L. 1974. Wild land: a mental health resource. The Canadian Nurse (June):20-22.

_______________ 1976. The natural environment: a neglected variable in personality studies. Term Paper for Educational Psychology 515, University of Alberta. (Mimeographed.) 24p.

Stephenson, Marylee. 1978. Mountain-climbing: experience and function. Paper presented at the Second Canadian Congress on Leisure Research, Toronto. (Mimeographed.) 19p.

Thorstenson, Clark T.; Richard A. Heaps; and Robert Snow. 1975. The effect of a twenty-nine day wilderness survival experience on anxiety and hearing sensitivity. Therapeutic Recreation Journal 9(3):117-120.

Literature on Leisure and Sport

Alderman, Richard B. 1974. Psychological Behavior in Sport. Toronto: W.B. Saunders Company. 280p.

Cuerrier, C. 1977. Dimensions reliées à la valorisation du risque dans le loisir chez les étudiants québécois. Unpublished Master's Thesis. University of Montreal.

Farina, John. 1974. Toward a philosophy of leisure. In Murphy, James F. (ed.) Concepts of Leisure. Englewood Cliffs, New Jersey: Prentice-Hall. Pp. 151-154.

Harris, Dorothy V. 1973. Involvement in Sport: A Somatopsychic Rationale for Physical Activity. Philadelphia: Lea and Febiger. 250p.

Kenyon, Gerald S. 1968. A conceptual model for characterizing physical activity. The Research Quarterly 39(1):96-105.

Lachapelle-Lemay, H. 1978. Dimensions reliées à la valorisation - pouvoir-prestige - dans les loisirs par des étudiants québécois. Unpublished Master's Thesis. University of Montreal.

Ouellet, Gaétan. 1973. Relations entre les valeurs de travail et de loisir d'étudiants de niveaux collegial et universitaire. Unpublished Ph.D. Dissertation. University of Montreal.

________________ and Jacques Perron. 1978. Leisure values: an aspect of the psychological meaning of leisure. Paper presented at the 2nd Canadian Congress on Leisure Research, Toronto. (Mimeographed.) 15p.

Trahan, L. 1977. Dimensions reliées à la valorisation de la réalisation de soi dans le loisir par les étudiants québécois. Unpublished Master's Thesis. University of Montreal.

Survey Research Methodological Literature

Babbie, Earl R. 1973. Survey Research Methods. Belmont, California: Wadsworth Publishing Company, Inc. 384p.

Burton, Thomas L. and Gordon E. Cherry. 1970. Social Research Techniques for Planners. London: George Allen & Unwin, Ltd. 137p.

Champion, Dean J. and Alan M. Sear. 1969. Questionnaire response rate: a methodological analysis. Social Forces 47(3):335-339.

Clausen, John A. and Robert N. Ford. 1947. Controlling bias in mail questionnaires. Journal of the American Statistical Association 42(240):497-511.

Deutscher, Irwin. 1966. Words and deeds: social science and social policy. Social Problems 13(3):255-

Ellis, Robert A.; Calvin M. Endo; and J. Michael Armer. 1970. The use of potential nonrespondents for studying nonresponse bias. Pacific Sociological Review 13(2):103-109.

Franzen, Raymond and Paul F. Lazarsfeld. 1945. Mail questionnaires as a research problem. Journal of Psychology 20:293-320.

Lehman, Edward C. 1963. Tests of significance and partial returns to mail questionnaires. Rural Sociology 28:284-289.

Oppenheim, Abraham N. 1968. Questionnaire Design and Attitude Measurement. London: Heinemann. 298p.

Rosenau, James N. 1964. Meticulousness as a factor in the response to mail questionnaires. Public Opinion Quarterly 28:312-314.

Rosenberg, Morris. 1968. The Logic of Survey Analysis. New York: Basic Books Inc., Publishers. 283p.

Published Popular Sources on Wilderness Canoeing

Browning, Peter. 1975. The Last Wilderness. San Francisco: Chronicle Books. 117p.
(Lake Athabasca to Great Slave Lake via Dubawnt, Taltson, and Snowdrift Rivers by Browning and Blunt)

Causey, Don. 1977. The river that calls to the bold. Outdoor Life 160(2):69 ....
(Back River trip by Perkins and Payton)

Davidson, James West and John Rugge. 1976. The Complete Wilderness Paddler. New York: Alfred A. Knopf. 259p.
("How-to" book on wilderness canoeing)

________________ 1977. One River Down. Chestertown, New York: Paddler Productions.
(32-minute, 16 mm. film about canoe trip)

Dufresne, Jean-Claude. 1977. La rivière Kaniapiskau: six semaines d'aventures au Nouveau-Québec. Nord (Septembre/Octobre):36-41.
(Kaniapiskau River trip by Dufresne *et al*.)

Ferry, Jon. 1977. Prince Andrew pounces on 'polluter'. Edmonton Journal, July 15:1 ....
(Coppermine River trip by Prince Andrew *et al*.)

Gaskin, Fred. 1972. Our Christmas story. Economical Insurance (Issue unknown):4.
(First all-Canadian Back River trip by Gaskin *et al*.)

__________ 1976/77. Retracing Tyrrell's journey into the Barren Lands. Canadian Geographical Journal 93(3):46-53.
(Dubawnt River trip by Gaskin *et al*.)

__________ ? Harricanaw. Old Town Canoe Company advertisement. 4p.
(Harricanaw River trip by Gaskin *et al*.)

Gilbert, Bill. 1974. Canoes north - more than an adventure. Arctic in Color 3(1):1-9.
(General advice about wilderness canoeing in Northwest Territories)

Goddard, Ted. 1977. A tale of Arctic adventure. Canadian Boating 53(4):4 ....
(Yellowknife-Coppermine Rivers trip by Goddard *et al*.)

Harrison, Judy. 1976. Safety first, last and always. Canoe 4(2):8-10.
(Safety tips for wilderness canoeing)

Hartley, Norman. 1973. Reconquering the Back River. Weekend Magazine 23(29):6-9.
(First all-Canadian Back River trip by Gaskin *et al.*)

Herfindahl, Orris. 1965. Across the Barrens by canoe. North (September/October):1-11.
(Hanbury and Thelon Rivers trip by Herfindahl *et al.*)

Horricks, John. 1976. The Coppermine adventure. Outdoor Canada (May/June):40-46.
(Coppermine River trip by Horricks *et al.*)

Hoyt, Austin. 1963. Down the Back to the Arctic. Sports Illustrated 19(9):34-41.
(First Back River trip since James Anderson, 1855, by Hoyt *et al.*)

Knopke, Katie and Christy Buetow. 1977a. Nahanni. Mariah 11(2):34 ....
(South Nahanni River trip by Knopke *et al.*)

____________ 1977b. The South Nahanni River expedition. Minneapolis Tribune (November 13):1 ....
(South Nahanni River trip by Knopke *et al.*)

Lentz, John. 1976. Be prepared! More than a motto in wilderness camping. Canoe 4(4):16-18.
(Safety tips for wilderness canoeing)

Luste, George. 1971. A memory of the north. The Beaver 302(1):48-52.
(Photographic and poetic essay of Dubawnt River trip by Luste *et al.*)

McGuire, Thomas. 1977. 99 days on the Yukon. Anchorage, Alaska: Alaska Northwest Publishing Company. 184p.
(Yukon River trip by McGuire and Wolf)

McNeil, Helen. 1975. Arctic voyageurs. Arctic in Color 4(3):32-36.
(Description of Eric Morse's wilderness canoeing activities)

Morgan, Michael. 1962. Eleven hundred miles by canoe. North 9(2): 35-36.
(Uranium City to Coppermine by Brown *et al.*)

Morse, Eric. 1965. Fresh water northwest passage. Canadian Geographical Journal 70(6):2-11.
(Completion of fresh water Northwest Passage by Morse *et al.*)

____________ 1967. Summer travel in the Canadian Barren Lands. Canadian Geographical Journal 74(5):2-23.
(How to conduct canoe trips in the Barrens)

Morse, Eric. 1970. Challenge and response: the modern voyageur. In Spears, Borden (ed.) Wilderness Canada. Toronto: Clarke, Irwin & Company Limited. Pp. 49-55.
(Historical and descriptive essay on wilderness canoeing)

___________ 1976. Maps and wilderness canoeing. Ottawa: Surveys and Mapping Branch, Department of Energy, Mines and Resources, Government of Canada.
(Instructional pamphlet)

___________ 1977. Recreational canoeing in Canada: its history and its hazards. Canadian Geographical Journal 95(1):18-25.
(Historical and descriptive essay on recreational canoeing)

Osgood, Lawrence. 1977. The primal landscape. Quest 1(3):46 ....
(Horton River trip by Osgood et al.)

Patterson, R.M. 1966. The Dangerous River. Sidney, British Columbia: Gray's Publishing Ltd. 272p.
(South Nahanni River adventure by Patterson et al.)

Perkins, Rob and Bernie Payton. 1977a. Arctic tundra by canoe. Old Town Canoe Company advertisement. 8p.
(Back River trip by Perkins and Payton)

___________________________ 1977b. Back River journal. Gray's Sporting Journal 2(1):28-39.
(Back River trip by Perkins and Payton)

___________________________ 1977c. The not-so-barren tundra. Harvard Magazine 79(8):37 ....
(Back River trip by Perkins and Payton)

Polese, Carolyn. 1977. Expedition stress. womenSports (October): 59-63.
(Description of stress-related aspects of Thelon River trip by Polese et al.)

_____________ and Peter Lehman. 1976. Canoeing Canada's Barrens. North (September/October):12-17.
(Thelon River trip by Polese et al.)

Richardson, Sandy. 1978. Sarvaqtuuq: following Tyrrell's route. Outdoor Canada 6(7):24-29.
(Kazan River trip by Richardson et al.)

Saskatchewan Tourism and Renewable Resources. Ongoing. Saskatchewan canoe trips.
(Series of booklets on Saskatchewan canoe trips)

Sloan, Tony. 1977a. The Canadian tundra by paddle and sail. Ottawa: Office of Tourism, Canadian Government. (Mimeographed.) 8p. (Ferguson River trip by Sloan _et al_.)

__________ 1977b. Blackflies and White Water. Toronto: McClelland and Stewart. 191p. (Collection of essays on various canoe experiences)

Stirling, Jim. 1977. Charles Wolf from Fairbanks, Alaska. North (May/June):2-3. (Description of well known canoe tripper)

Sutton, Charles. 1976. Canoe magazine survey of subscribers. Canoe brochure, available on request. 5p. (Survey includes primarily market-related information)

Travel Alberta. 1979. Canoe Alberta. (Edited by Bernice Parry). (Information about canoe trips and tripping in Alberta)

TravelArctic. 197?. Canoe Canada's Arctic. 20p. (Information about canoe trips and tripping in Northwest Territories)

Trudeau, Pierre Elliott. 1970. Exhaustion and fulfillment: the aescetic in a canoe. In Spears, Borden (ed.) Wilderness Canada. Toronto: Clarke, Irwin & Company Limited. Pp. 3-5. (Philosophical essay about wilderness canoe tripping)

Vyvyan, C.C. 1961. Arctic Adventure. London: Peter Owen Ltd. 172p. (Trip from Aklavik to Fairbanks via Rat, Bell, Porqupine and Yukon Rivers by Vyvan and friend in 1926)

Information on the Protection and Management of Wild Rivers

Hooper, Ron. 1979. Protection for rivers of natural, historical and recreational value in Canada and the United States. Alberta Wilderness Association Newsletter (Spring Supplement) 11(2):13-15.

APPENDIX 1

FACILITIES FOR USE BY RECREATIONAL CANOEISTS TAKING TRIPS IN THE NORTHERN WILDERNESS

Two facilities exist at the present time solely for the convenience of the recreational canoeist planning a trip in the northern wilderness. One is the Hudson's Bay Company's U-Paddle Canoe Rental Service, begun in 1964, which rents canoes suitable for tripping which may be picked up and returned at any Hudson's Bay store. This service reduces prohibitive shipping costs for bulky canoes, and to a large extent reduces the logistical problems of returning canoes to a location from which they can be transported home.

The second facility is the canoe travel information service. One such service is operated by TravelArctic of the Division of Tourism of the Government of the Northwest Territories. In addition to publishing a pamphlet called "Canoe Canada's Arctic" and to serving as a clearing-house for logs of trips which canoeists offer to submit, the TravelArctic office answers individual letters requesting information. The travel counsellor, Mrs. M. Braathen, and an assistant respond to about 80% of the requests with standardized, selected paragraphs, and to the remaining requests with customized letters. The emphasis in the replies is on giving information about specific routes, transportation, and buying supplies in the north. Advice about northern conditions is given if the inquirer appears to be inexperienced. This information service has seen a steady increase in use by canoeists since TravelArctic was created in 1968.

In Saskatchewan, the Department of Tourism and Renewable Resources publishes a "Canoe Saskatchewan" booklet and offers a set of booklets giving information on fifty-five possible canoe trips in that province from which wilderness trips can be selected. "Canoe Alberta" is published by Travel Alberta. It includes descriptions of river trips in the wilderness in the north of the province. The Saskatchewan service began in 1965 and the Albertan in 1972. Finally, a pamphlet called "Maps and Wilderness Canoeing", written by Eric Morse and distributed by Energy, Mines, and Resources of the Canadian Government, describes how to order and use topographic maps and air photos in the canoe trip situation.

In addition to these institutional sources of assistance, there are now many popular magazines which occasionally feature articles written by canoeists about their trips which offer at the least some information about how trips are conducted, and at the most a name and address for further information. There is also one book, The Complete Wilderness Paddler, published in 1976, which describes in a very detailed manner the planning of, preparing for, and taking of a long canoe trip in the northern wilderness. The authors of this book, John Rugge and Jim Davidson, have produced a commercial film, named One River Down, about another northern canoe trip. (A selection of this type of information source is listed in the bibliography.)

APPENDIX 2

INTERVIEW SCHEDULE

Group A

1. I would like you to try to remember your favorite wilderness canoe trip, and answer some questions about it:

   When was it?

   Where was it?

   How long? ____ days ____ kilometers

   How many were in the party?

2. Why did you choose that particular location?

3. Why didn't you hire a guide?

   Would you care to go on a guided trip?

4. Sketch a map of your trip, marking five or six places along the way which you remember especially well.

   Briefly describe why each is memorable.

   Would you like to visit these places without the use of a canoe?

   Why, or why not?

5. Can you tell me about how you prepared for the trip?

   - skills and experience
   - choosing companions
   - learning about the route
   - acquiring equipment
   - organizing equipment
   - safety precautions

6. What activities did you engage in while on the trip?

7. Name some hazards which you encountered.

8. What was your reaction to

   - meeting other people?
   - seeing evidence of modern culture?

- seeing traces of traditional culture?

9. What are some features of this trip for which you would look in a future trip? For which you would not look?
10. What sorts of benefits do you think you gained from the trip? Were they what you had expected?
11. Could you briefly describe a slide show you might prepare about your trip?

    What ideas would you want to convey to the audience?

Group B

1. How much planning is too much? Too little?

   Why do you say that?
2. If you had the option of taking any of the following items on a trip, to which would you object, and which others would you find desirable?
   - SLR camera
   - movie camera
   - splash cover
   - rifle
   - distress radio
3. If the opportunity to canoe in wilderness was not available to you, for some reason external to yourself, what would you do instead?

   Do you have a winter-time substitute for canoeing?
4. How do you distinguish between what you get out of a weekend canoe trip on the one hand, and a longer trip (more than one week) on the other?

Group C

1. Respond to my summary of your motivations for wilderness canoeing.
2. Please outline your experience with wilderness canoeing.

Where does the trip you have described fit in?

3. What is your occupation?

Age?

(Sex?)

Do you have any affiliations with groups concerned with the outdoors?

APPENDIX 3

EXAMPLES TAKEN FROM INTERVIEWS OF THE USE OF QUESTIONS DESIGNED TO STIMULATE CONVERSATION

Example A

INTERVIEWER: When I asked you to draw the map of your trip [Little Nahanni and South Nahanni] I don't think I said, "Draw a map of the Little Nahanni", yet what you did was to concentrate completely on the Little Nahanni. It's interesting to me that you even chose to do the Little Nahanni because I don't think that stretch of river has been publicized like the South Nahanni. Also, I'm interested in why you drew the map of that stretch and not of the rest.

RESPONDENT: WE CONSIDERED THE QUESTION OF ACCESS TO THE PARK, AND WE KNEW WE COULD FLY IN. IN THE FIRST PLACE, THERE'S CONSIDERABLE EXPENSE. NOW, WE COULD HAVE AFFORDED THAT, BUT WE STILL TRIED TO CUT COSTS. SECONDLY, FLYING IN IS THE EASY WAY, USUALLY; AND IF YOU CAN DO OTHERWISE - IF YOU HAVE THE TIME, THE ENERGY, THE RESOURCES - IT'S MORE REWARDING TO DO IT WITHOUT THAT TYPE OF SUPPORT, BY MACHINES AND PLANES AND ALL. AGAIN, IT'S WHAT YOU'RE USED TO. I'M NOT USED TO SPENDING MONEY ON THESE THINGS, SO I DIDN'T LIKE THE IDEA OF SPENDING MONEY ON THE TRIP.

WE LOOKED AT ALTERNATIVES, AND WHAT ALTERNATIVES WERE THERE? WE HEARD FROM SOMEBODY WHO IS A PHYSICIAN IN WHITEHORSE WHO HAS BEEN FLYING ALOT IN THE COUNTRY ABOUT THE LITTLE NAHANNI AS A POSSIBILITY FOR ACCESS. HE ALSO TOLD US THAT THE FLAT RIVER, WHICH ORIGINATES IN THE SAME PLACE, WAS TOTALLY HOPELESS. BUT HE SAID THAT THE LITTLE NAHANNI WOULD BE A POSSIBILITY. SO WE EXPLORED

THIS POSSIBILITY. WE COULDN'T GET ANY INFORMATION ON IT. THEN WE GOT AERIAL PHOTOGRAPHS AND LOOKED THOSE OVER, AND FINALLY WE CAME UP WITH THE IDEA THAT THAT WAS WHAT WE WANTED TO DO.

AS A MATTER OF FACT, WE HAD HEARD SO MUCH ABOUT THE SOUTH NAHANNI ITSELF - WE'D SEEN SLIDES ABOUT IT, HEARD ABOUT IT, READ ABOUT IT - IT SEEMED LIKE WE KNEW IT, AND IT WASN'T A WILDERNESS EXPERIENCE ANY MORE. HOWEVER, HERE WAS SOMETHING TOTALLY UNKNOWN TO US, AND THAT WAS REALLY INTERESTING. AND IT TURNED OUT THAT IT ABSORBED MUCH OF OUR ENERGY, MUCH OF OUR TIME (NAMELY, CLOSE TO TWO WEEKS), AND PROVIDED US WITH LOTS OF GOOD AND BAD EXPERIENCES. I'LL TELL YOU LATER THAT WE BROKE MY CANOE IN HALF FURTHER DOWN.

SO IT WAS A FANTASTIC EXPERIENCE, BECAUSE HERE WE WERE IN COUNTRY THAT SEEMED TO BE TOTALLY UNTOUCHED BY PEOPLE. I'M SURE PEOPLE HAVE BEEN UP AND DOWN THE RIVER: PROSPECTORS, OTHERS, AND WHAT HAVE YOU. BUT THERE WERE NO TRACES OF THEM; WE HAD NO RECORDS. WE WERE REALLY TOTALLY ON OUR OWN.

Example B

I: Why did you pick that river [the Hanbury-Thelon] in particular?

R: WELL, THERE ARE A NUMBER OF REASONS, AND THESE AREN'T IN ANY ORDER OF PRIORITY. CERTAINLY THE THELON GAME PRESERVE - THERE WERE A REPORTED 600 PLUS MUSKOXEN ON IT - WAS ONE REASON. I GUESS ANOTHER REASON WAS THAT MY BROTHER'S WIFE WAS GOING AND IT WAS HER FIRST NORTHERN TRIP. THAT'S A REASON FOR IT BEING NOT TOO DEMANDING.

AND I GUESS THERE'S A THIRD REASON, AND THAT WAS THAT WE'D DONE A FILM OF THE COPPERMINE WHICH WAS QUITE A SUCCESS. BUT WE WANTED TO DO A DIFFERENT KIND OF FILM. THE COPPERMINE IS A VERY CHALLENGING TRIP IN TERMS OF RIVER NAVIGATION. FOR US, BY

HAPPENSTANCE, IT WAS ALSO SUPERB FROM THE POINT OF VIEW OF WILDLIFE BECAUSE WE RAN INTO THE HERD OF 98,000 CARIBOU. (THAT'S WHAT THE WILDLIFE CENSUS SAID WE HAD RUN INTO.) BUT WE REALLY WANTED A CANOE TRIP THAT SHOWED US THE BARRENS: THE LIFE OF THE BARRENS, THE FAUNA AND THE FLORA, AND THE MOODS. WE WERE TRYING TO SWITCH FROM OUR OWN MOODS, FROM THE INTROSPECTIVE KIND OF TRIP, TO ONE WHERE YOU LOOKED AT THE SURROUNDINGS AND WHERE WE WERE NOT AS IMPORTANT AS THE SURROUNDINGS. AND YOU KNOW FROM YOUR OWN TRIP ON THE COPPERMINE THAT YOU WERE VERY IMPORTANT, BECAUSE UNLESS YOU WERE VERY UNUSUAL, YOU WERE SPENDING ALOT OF TIME BEING SCARED AND WORRYING ABOUT THE NEXT RAPID, AND SO ON.

I: And always alert.

R: ALWAYS ALERT. SO, THE HANBURY'S A RELATIVELY SMALL RIVER WITHOUT MANY REALLY FRIGHTENING RAPIDS, AND THE THELON'S A BREEZE. IT'S A SLOW-MOVING BODY OF WATER WHICH TAKES YOU ALONG THROUGH THE COUNTRYSIDE. NO GREAT CLIFFS - YOU CAN SEE A LONG WAY, AND YOU CAN SEE THE WILDLIFE ON THE SHORES AND THE PLANTS AND THE TREES AND THE WATER SWIRLING AROUND AND THE SUNSETS REFLECTED AND THAT KIND OF THING. KIND OF DIFFERENT FROM THE COPPERMINE.

I: So you would say the two different trips gave you different kinds of benefits?

R: TOTALLY, YES. THERE WAS OVERLAPPING, OF COURSE. ONE OF THE BENEFITS THAT I'M SURE EVERYBODY TALKS ABOUT IN WILDERNESS CANOE TRIPS IS THE SORT OF MASOCHISTIC - I DON'T KNOW WHETHER MASOCHISM IS ANY WAY TO DESCRIBE A BENEFIT - BUT THE FACT THAT YOU CAN GO AND EXERT YOURSELF PHYSICALLY TO YOUR ABSOLUTE LIMIT AND THE WONDERFUL FEELING WHEN YOU STOP EXERTING YOURSELF AND WHEN THE PAIN IS OVER - THAT

KIND OF THING. THERE'S SOME OF THAT ON THE HANBURY-THELON TOO, BUT IT'S A MINOR PART OF IT.

I: Is that an important part to you?

R: WELL, SURE IT IS. I THINK MOST OF US WANT TO BE ABLE TO PROVE TO OURSELVES THAT WE CAN STILL CARRY A CANOE OR RUN A RAPIDS OR PORTAGE A LONG STRETCH WITH A CANOE AND A SMALL PACK. IT IS ONE OF THE MOTIVES.

Example C

I: What do you think you would have felt had you run into, say, a fishing group or hunting group?

R: IT WOULDN'T HAVE MATTERED TOO MUCH. WE PROBABLY WOULD HAVE SPENT A MINIMAL AMOUNT OF TIME AROUND THEM BECAUSE WE WERE VERY FLEXIBLE. WE MORE OR LESS JUST FOLLOWED OUR NOSES WHERE WE WANTED TO GO; AND IN OTHER SITUATIONS WHERE WE RAN INTO PEOPLE, WELL ... THE COUNTRY'S PRETTY BIG. IF YOU DO RUN INTO ALOT OF OTHER PEOPLE ON THESE TRIPS, OFTEN THEY'RE DOING SIMILAR TYPES OF THINGS AS YOU ARE, SO IT'S NOT REALLY UPSETTING.

I: They fit in.

R: YEAH, THEY FIT IN.

I: You said you followed your nose, and yet you were in a group of eight people. Did you find it was difficult to conduct a trip in that manner with so many people?

R: NOT REALLY. WE HAD THE GOOD FORTUNE OF BEING ABLE TO GET ALONG QUITE WELL. MOST OF US HAD BEEN ON A MAJOR TRIP BEFORE, AND WE'D ALL DONE ALOT OF CANOEING TOGETHER, AND WE KNEW WHAT WAS INVOLVED. WE'D TALKED OVER SOME OF THE THINGS THAT DO ARISE. I THINK THE PEOPLE WHO WERE ON THE TRIP, HAVING EXPERIENCED OTHER TRIPS, KNEW

HOW TO GET ALONG IN THOSE SITUATIONS. AFTER TWENTY DAYS IN CLOSE CONFINEMENT WITH PEOPLE, EVEN THOUGH YOU'RE OUTDOORS, ALOT OF THINGS START TO HAPPEN WITH YOUR SOCIAL RELATIONSHIPS. OFTEN, POSSIBLY, CERTAIN LITTLE THINGS BECOME VERY IRRITATING TO PEOPLE, PARTICULARLY IF YOU'RE FATIGUED.

I, MYSELF, BEFORE I PREPARED TO GO ON THE TRIP, HAD SPENT TIME THINKING ABOUT THESE THINGS AND I KEPT REMINDING MYSELF AS I WENT ALONG. IF ON ONE PARTICULAR DAY OR INSTANCE I HAD AN IDEA ABOUT WHAT WE SHOULD BE DOING, OR IF SOME ACTIVITY OF SOMEONE ELSE WOULD BE JUST A LITTLE ANNOYING TO ME, I WAS QUITE ABLE TO HANDLE IT.

APPENDIX 4

RELEASE FORM

1. I agree to my interview on __ ______________ with Leslie Kroening about wilderness canoeing being recorded.
2. I agree to Leslie Kroening using the contents of the interview in whatever manner she wishes on condition that the use of the interview is such that I am not identified with it.

____
(Date)

____
(Signed)

APPENDIX 5

THE DETAILED CONTENT ANALYSIS FOR ONE INTERVIEWEE

Initial
Age
Sex
Affiliations
Occupation
Name of River
    kilometers
    duration
    year of trip
    number in party

This information has been omitted to protect the identity of the interviewee.

Reasons for location: already decided by someone else, satisfied with location because he hadn't done this trip

Reasons no guide: wanted to explore; wanted to choose own route and unused campsites; only need guide if not properly prepared or knowledgeable

Memorable places: almost landed on wrong lake at outset (excitement, commitment), portages, first sighting of muskoxen, swimming at gravel esker (letting himself go), large lakes (dangerous), fast current at end

Preparation: historical reading, pre-packaged meals, camera gear, practiced canoeing (increased confidence, physical conditioning, mental readiness), life preservers, emergency kit, at least 2 canoes

Activities: exploring, fishing, photography, writing journal

Hazards: rapids, waterfalls, canyons, improperly marked maps, insects, inadequate food, wind on lakes and open water, injury while walking, ice-blocked route

Meeting people from modern cultures: turned him off, took away feeling of self-reliance, very important to think his group was the only one there

Meeting people from traditional cultures: interesting, something to look forward to seeing, relieved monotony

Features to repeat: named none - went directly to "features not to repeat"

Features not to repeat: lack of variety, lack of current, cold water (would like to go swimming), lack of time to reflect and experience country

Benefits: experience of being like the explorers in an un-explored, unpopulated land; proving to himself he could be completely self-sufficient away from society

Benefits expected or not: partly

Ideas for slide show: use few slides; use them as a reference to tell what the north country is about, ie. loneliness, isolation, having to fend for yourself

Right amount of planning: know what you will encounter, be prepared for weather, have enough food, know what to expect of rivers, how long the trip will take, too much planning makes excitement peak too early and trip is anticlimactic, trying to achieve time objective might detract, prepackaged meals means you can't have more

Desirable items: rifle - dubious protection, survival

Undesirable items: radio - cheating, not relying on oneself, removing sense of danger

Alternative sports: mountain climbing (long trips), hiking (similar in self-sufficiency)

Winter substitutes: X-C skiing

Weekend vs. longer trips: not nearly as much preparation, end is in sight, river is already well-explored, not the hardships, no isolation (can walk out)

Motivations: to experience the north, to be like explorers, to prove he could cope on his own devices (realized this after), asked to come, to experience an adventure similar to one seen in a slide show, curiosity about the north

Experience: little apart from trip and practice for it

Other: importance of anticipation, camera prevents one from looking fully at nature - frames only a small part, trip had a leader - the one who had done the most reading

APPENDIX 6

AN INTERPRETIVE SUMMARY OF AN INTERVIEW

J. has taken at least three wilderness canoe trips (Taltson, Yellowknife, Beaulieu). Each trip was unique in its character according to the pace, purpose, and companions. He doesn't have a favourite trip, but prefers to think in terms of favourite parts or aspects of particular trips. He preserves the uniqueness of each trip through writing journals about each of them, which he enjoys re-reading and sharing with friends.

For J., the experience of a trip is conditioned substantially by the expectations and habits of his companions. Those on his first trips were relatively formal in their organization, always having a decision-making leader, established rituals, and a pre-determined daily schedule (except in windy conditions). They also tended to travel fast. J. has since developed a preference for relative informality, group decision-making, and more leisurely (although not lazy) travel. In the ideal situation, group members are people who cooperate without prompting, who don't jeopardize the group by taking unnecessary risks, who are able to arrive at group decisions, and who tend to fall naturally into roles which suit their individual personalities and talents. Despite this developmental change in preference, J. is grateful for what he learned from the first group of companions, particularly how to travel efficiently with suitable equipment and procedures. Furthermore, his motivations for canoe tripping have not changed substantially. He now feels he can get the same satisfactions from doing a trip in a more relaxed, informal style that he received from tripping in his earlier style.

The two major aspects of tripping which he indicates motivate him to go on trips can be summarized as "being part of the country" and "being self-reliant". He does not appear to view these aspects as separate from one another, but talks about them as if they were parts of a whole, inextricably linked. He is attracted to "the country" (in fact, he moved north recently) because of "wanting to be able to depend on oneself to do things. Alot of it's just being in the country for me, just fresh air and clean water, my own fish to fry occasionally, paddling with my own hands. I like doing things myself."

The country provides the environment for self-reliance, which he distinguishes from the social environment by pointing to the characteristics of decision-making in either context. In the social environment, "the decisions that are made ... or that I make are based on things that are being done in the larger society"; and, "sometimes we work hard at something in the more complex society and we don't know whether we've won or not, in that we don't know whether we've achieved the objective we've set". In the country, "you're not in the hands of the country ... If you decide to go from here to Fort Reliance, and you're careful and go at your own speed and don't take chances, you'll get to where you're going. You'll enjoy it. You'll feel you've done something that's worthwhile. You won't be let down."

Decisions are important, and the consequences simple to understand. The primary purpose of decisions is to satisfy the physical needs of living day-to-day on the essentials to which one has pared one's life. For example, on the gruelling Yellowknife River trip, "we didn't have to show off. We just had to make it". J. feels that tough trips like this one attract physically active people who want to rise to a challenge - the challenge of making it. Making it depends on very careful ("conservative") planning, considered judgment, and efficient use of appropriate equipment. J.'s current preference is that the style of "making it" be one of adapting to the rhythm of the country as opposed to imposing one's own rhythm on it. In any case, excitement on a trip arises from decision-making, because decisions (eg. to run a rapid or not to run it) are important and directly related to survival and comfort. He describes this excitement as the "edge" on a trip. A trip in a remote area always has an edge on it, even if the trip is done "well", that is, risks are successfully avoided.

Substitutes or alternatives for wilderness canoeing are dog trips or long sailing trips. He describes a dog trip as "living off the country for a month or so, going after caribou and living in a tent and just being self-reliant, which is virtually the same thing. It's just a different means of transportation, a more severe time of the year, different equipment - with one exception, that you've got these live animals that you rely on and you aren't just relying on yourself." A sailing trip would give similar satisfactions, but he would require companions on such a trip.

Being self-reliant is a part of being in the country. Getting into the rhythm of a trip takes about 3 - 4 days at which time, "you start to stop looking at your watch and start to appreciate the things around you ... you've got alot ahead of you. There's a sense of timelessness after half of a 3- or 4-week trip."

In later trips (and notably, those of which he took an active part in the organization) he enjoyed getting into the rhythm of the country, adapting his schedule to that of weather and other physical conditions. This might involve very hard work, such as crossing a lake during a brief calm, or it might involve paddling at night, or getting up for a very early start on the day. Largely, it involves appreciating the immediate environment. "... How do you tell someone that maybe the most important thing was the day you got up and the mist was just sitting on the water and the sun was coming through it and there was this spider web between two trees with dew on it and it was catching the light. And it just felt good to be alive." J. speaks of talking to the wind and weather, as if they were forces with which he was in communication. He would like to repeat trips just to get to know the country more intimately. He also remarks on a desire to see new and different places, and to learn more about the country in which he lives.

Part of fitting in with the country means leaving no signs of having been there, with the possible exception of a blaze to mark a portage trail. While J. enjoys finding remains with historical significance, he objects strongly to garbage and cairns being left behind. And while he objects to meeting numbers of fly-in fishermen because of the noise and disruption, he now enjoys meeting people on the trail because they are part of the country and have reasons as valid as his for being there.

J. gave me two warnings concerning my study. First, perhaps it is not wise to look too deeply into our motivations for doing such trips because motivations are complex, and, in combination, they add up to a whole not amenable to understanding by analysis. Second, in such studies we must look at the values which lie behind external manifestations, rather than examining the externals themselves.

APPENDIX 7

FINAL DRAFT OF THE COVERING LETTER AND THE QUESTIONNAIRE

DEPARTMENT OF GEOGRAPHY
TELEPHONE (403) 432-3274

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA T6G 2H4

Dear

In at least one of my many conversations with canoeists, your name was mentioned as someone who may be able to help me. I am a graduate student at the University of Alberta in the Department of Geography. For my thesis research, I am trying to learn about people like you who have taken long wilderness canoe trips. My intent is to understand why people enjoy such trips.

The topic of wilderness canoeing has been especially interesting to me as I have taken a long canoe trip, on the Coppermine River in 1976. I have interviewed in depth fifteen wilderness canoeists from various parts of Canada in the initial stage of my study. From their comments, I have written this questionnaire in order to find out what a large number of wilderness canoeists feel about their trips.

I hope that you will be able to help me by filling in the copy of the questionnaire enclosed. It should take about forty minutes to complete. In addition, there are three optional questions which will take about ten minutes more if you care to fill them in. Your answers are important to me.

You may remain anonymous. I have no way of tracing your responses back to you. Please return the questionnaire to me in the stamped, addressed envelope provided. In exchange for your help to me, I will send you a resume of the results of the study sometime during 1978, if you will mail me a postcard separately from the questionnaire, requesting the resume and giving me your name and address.

The directions for answering the questionnaire will be found on the first page. I hope that answering the questions which follow will bring back some pleasant memories for you.

Sincerely,
Leslie Kroening
Leslie Kroening

GENERAL DIRECTIONS

THIS QUESTIONNAIRE IS ABOUT A LONG WILDERNESS CANOE TRIP WHICH YOU MAY HAVE TAKEN. SUCH A TRIP MUST HAVE MET AS MANY OF THE FOLLOWING CONDITIONS AS POSSIBLE. THINK OF ANY TRIPS YOU HAVE DONE WHICH HAVE MET MOST OR ALL OF THE FOLLOWING CONDITIONS. PLACE A CHECK (✓) IN THE SPACE BESIDE THE CONDITIONS WHICH THESE TRIPS HAVE MET:

( ) The trip was longer than one week in duration.

( ) The trip was conducted without the services of a professional guide.

( ) Members of the canoe party participated voluntarily (rather than, say, as members of a school field trip or military group).

( ) The trip was conducted on a river or lake system without road, train, barge, or 4-wheel drive access for at least one week.

( ) Travel along the river or lake system in question was unsupplemented by motors for at least one week.

WHEN ANSWERING THE QUESTIONS IN THE QUESTIONNAIRE, TRY TO THINK ABOUT ONE TRIP YOU HAVE DONE WHICH MEETS THE MOST OF THE PREVIOUS CONDITIONS. IF YOU HAVE DONE MANY SUCH TRIPS, THEN CHOOSE EITHER THE ONE OF WHICH YOU HAVE THE MOST PLEASANT MEMORIES, OR YOUR MOST RECENT TRIP. THE CHOICE IS YOURS.

I REALIZE THAT THIS TOPIC, WILDERNESS CANOEING, IS VERY DIFFICULT TO DEAL WITH IN A QUESTIONNAIRE FORMAT. NEVERTHELESS, I AM HOPING THAT MY QUESTIONS WILL BE MEANINGFUL TO YOU (BECAUSE ONLY THAT WAY WILL THEY BE MEANINGFUL TO ME). IF A QUESTION DOES NOT MAKE SENSE TO YOU, OR IF YOU FIND ONE TOO DIFFICULT TO ANSWER, DON'T ANSWER IT. PLEASE CROSS THE QUESTION OUT AND GO ON TO THE NEXT ONE.

SECTION 1: PAST EXPERIENCE

THIS SECTION OF THE QUESTIONNAIRE FOCUSES ON THE OUTDOOR EXPERIENCE YOU HAVE HAD WHICH IS RELATED TO WILDERNESS CANOE TRIPPING.

1. HOW MANY YEARS HAVE YOU BEEN CAMPING ON A FREQUENT BASIS?
About _____ years

2. PLACE A CHECK BESIDE EACH STATEMENT BELOW TO INDICATE HOW MUCH OF EACH STYLE OF CAMPING YOU HAVE DONE:

None	A little	Quite a bit	A great deal	
☐	☐	☐	☐	Camping in larger campgrounds with showers, washrooms, and other modern conveniences
☐	☐	☐	☐	Camping in medium to smaller campgrounds with dry pit toilets and water supply only
☐	☐	☐	☐	Camping in the backcountry with no facilities

3. HOW MANY YEARS HAVE YOU BEEN CANOEING ON A FREQUENT BASIS?
About _____ years

4. HOW DID YOU LEARN TO CANOE? PLACE ONE OR MORE CHECK(S) BESIDE THE STATEMENT(S) DESCRIBING HOW YOU LEARNED:

☐ Through lessons
☐ With my family
☐ With a canoe club
☐ On my own (self-taught)
☐ With experienced friends
☐ Other (PLEASE SPECIFY) ______________________________

5. PLEASE LIST BELOW THE LONG WILDERNESS CANOE TRIPS YOU HAVE TAKEN, IN ORDER OF OCCURRENCE:

#	Year	River or lake system	Province or Territory	Duration in days (approx.)	Distance in miles (approx.)	Number of people in party	
						male	fml.
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

6. DOES THE ORDER IN WHICH YOU'VE DONE YOUR TRIPS HAVE A SPECIAL SEQUENCE TO IT?

( ) No → PROCEED TO QUESTION 7.
( ) Yes → CONTINUE WITH QUESTION 6a.

6a. PLEASE EXPLAIN BRIEFLY WHAT THAT SEQUENCE IS:

____

____

7. WHICH TRIP WILL YOU BE TRYING TO REMEMBER AS YOU FILL IN THIS QUESTIONNAIRE? Number _____ in the list in Question 5

8. PLACE A CHECK BESIDE THE ONE STATEMENT WHICH BEST DESCRIBES HOW IMPORTANT YOUR LONG WILDERNESS CANOE TRIPS ARE IN YOUR LIFE:

( ) My long canoe trip was a once-in-a-lifetime opportunity and I'll probably never take another one.

( ) I like to do long canoe trips, but there are many other things I could do that would be just as satisfying.

( ) If I had more money, I would take long canoe trips more often.

( ) If I had no other commitments, I would take long canoe trips more often.

( ) I plan to take long canoe trips on a regular basis, at least once every few years.

( ) Long canoe trips are a major part of my life nearly every summer.

( ) All aspects of taking long canoe trips are a major part of my life throughout the year.

THE NEXT THREE SECTIONS OF THE QUESTIONNAIRE ARE CONCERNED WITH THREE STAGES OF A LONG WILDERNESS CANOE TRIP: PLANNING FOR IT, THE TRIP ITSELF, AND REMEMBERING IT WHEN IT IS OVER.

SECTION 2: PLANNING YOUR TRIP

THE QUESTIONS IN THIS SECTION ARE RELATED TO ASPECTS OF PLANNING AND PREPARING FOR A LONG WILDERNESS CANOE TRIP.

9. PLACE A CHECK BESIDE ANY OF THE FOLLOWING CONDITIONS WHICH MUST BE MET BEFORE YOU WOULD CONSIDER GOING ON A LONG CANOE TRIP:

( ) I will be with a group of my very good friends.

( ) The area is relatively free from black flies and mosquitoes.

( ) The scenery is expected to be beautiful.

(CONTINUED ON PAGE 5)

(QUESTION 9, CONTINUED FROM PAGE 4.
CHECK CONDITIONS WHICH MUST BE MET ON A LONG CANOE TRIP.)

( ) The route is free from long or difficult portages.
OR
( ) There are long or difficult portages along the way.

( ) The location is new and different.
OR
( ) The location is familiar.

( ) There is some means to communicate with emergency rescuers.
OR
( ) The canoe party is dependent upon itself for emergency rescue.

( ) There are sites of historical interest to be found.
OR
( ) The area is nearly absent of evidence of human history.

( ) There are large lakes en route.
OR
( ) There are no large lakes en route.

( ) Firewood is plentiful.
OR
( ) Firewood is scarce.

( ) The river is free from difficult rapids.
OR
( ) The river has some difficult rapids.

( ) There is enough time available to schedule a number of days off, here and there.
OR
( ) We will have to push hard to get as far as we can in the time available.

( ) Likely, the area is completely absent of any other people.
OR
( ) Likely, there will be few people encountered along the way.
OR
( ) Likely, we will meet a number of people along the way.

10. WHAT IS THE NUMBER OF CANOES WITH WHICH YOU WOULD PREFER TO TRAVEL? (THINK ABOUT YOUR CHOSEN TRIP.)

_____ canoes in the party

11. BRIEFLY EXPLAIN WHY THAT IS YOUR PREFERRED NUMBER OF CANOES:

____

____

____

12. THIS QUESTION CONCERNS HOW YOU FEEL ABOUT THE ROLE OF PLANNING IN A LONG WILDERNESS CANOE TRIP. PLACE A CHECK BESIDE EACH STATEMENT TO INDICATE WHETHER YOU STRONGLY AGREE WITH THAT STATEMENT, MILDLY AGREE WITH IT, ARE NEUTRAL ABOUT IT, MILDLY DISAGREE WITH IT, OR STRONGLY DISAGREE WITH IT:

	Strongly agree	Mildly agree	Neutral	Mildly disagree	Strongly disagree
The purpose of planning is to promote security.	( )	( )	( )	( )	( )
Planning enables me to be resourceful in emergencies.	( )	( )	( )	( )	( )
Planning is almost as exciting as the trip itself.	( )	( )	( )	( )	( )
The purpose of planning is to remove every element of the unknown.	( )	( )	( )	( )	( )
Planning enhances the feeling of self-reliance.	( )	( )	( )	( )	( )
Planning permits me to be flexible while the trip is in progress.	( )	( )	( )	( )	( )
Planning is the same thing as safety.	( )	( )	( )	( )	( )
Planning is a necessary bother.	( )	( )	( )	( )	( )

SECTION 3: THE TRIP IN PROGRESS

THIS SECTION ATTEMPTS TO FIND OUT ABOUT YOUR EXPERIENCE OF THE TRIP WHILE IT WAS HAPPENING. REMEMBER TO THINK ABOUT A PARTICULAR TRIP WHILE ANSWERING THESE QUESTIONS.

13. PLEASE LIST BELOW UP TO THREE ACTIVITIES APART FROM PADDLING AND SLEEPING WHICH YOU MOST ENJOYED ON YOUR LONG CANOE TRIP:

1. ______________________________
2. ______________________________
3. ______________________________

14. THE CANOE, OF COURSE, IS A CENTRAL ELEMENT IN A LONG CANOE TRIP. PLACE THE NUMBERS 1 TO 5, IN ORDER OF IMPORTANCE, BESIDE THE STATEMENTS BELOW THAT BEST DESCRIBE HOW YOU PERCEIVE THE ROLE OF THE CANOE:

( ) The canoe is one of the best ways to get from A to B in the North American wilderness.

( ) The canoe provides me with the opportunity to develop a demanding technical skill.

( ) Travelling by canoe is one of the best ways to be a part of the wilderness.

( ) The canoe enables me and my companions to be on our own and independent.

( ) The canoe is economical transportation for recreation.

15. LONG CANOE TRIPS MAY PRESENT SOME HAZARDS TO THE CANOE PARTY.
   A) PLACE A CHECK BESIDE EACH ITEM BELOW TO INDICATE HOW SERIOUS A HAZARD YOU THINK EACH ONE IS.
   B) FOR EACH HAZARD YOU THINK IS VERY SERIOUS, LIST BRIEFLY THE PRECAUTIONS, IF ANY, THAT YOU HAVE TAKEN TO MINIMIZE THE DANGER.

Not serious at all	Somewhat serious	Very serious	
( )	( )	( )	wild animals (carnivores) ____________________ ______________________________
( )	( )	( )	wild animals (rodents) ____________________ ______________________________
( )	( )	( )	camping accidents ____________________ ______________________________
( )	( )	( )	rapids ____________________ ______________________________
( )	( )	( )	cold water ____________________ ______________________________
( )	( )	( )	remoteness from emergency help ____________________ ______________________________
( )	( )	( )	losing the way ____________________ ______________________________
( )	( )	( )	equipment breakdown ____________________ ______________________________

(CONTINUED ON PAGE 9)

(QUESTION 15, CONTINUED FROM PAGE 8.
HOW SERIOUS A HAZARD IS EACH ITEM?
FOR EACH VERY SERIOUS HAZARD, LIST PRECAUTIONS YOU HAVE TAKEN.)

Not serious at all	Somewhat serious	Very serious	
( )	( )	( )	unskilled or careless companions ______________ ______________________________
( )	( )	( )	unpleasant interaction with companions ________ ______________________________
( )	( )	( )	injury while portaging or lining ______________ ______________________________
( )	( )	( )	falling behind schedule ______________ ______________________________
( )	( )	( )	making poor judgments ______________ ______________________________

16. PLACE A CHECK BESIDE THE ONE STATEMENT BELOW WHICH MOST CLOSELY REPRESENTS THE WAY YOU VIEW THE VARIOUS PROBLEMS AND HARDSHIPS WHICH MIGHT ARISE ON A LONG WILDERNESS CANOE TRIP.

( ) The problems and hardships are to be avoided completely.

( ) They seriously reduce the enjoyment of a trip.

( ) They seem serious at the time but the seriousness fades in retrospect.

( ) They add to the character of a trip, should they occur.

( ) They are a desirable part of the challenge that I try to include in a long canoe trip.

17. BELOW IS A LIST OF DESCRIPTIONS OF WHAT A LONG WILDERNESS CANOE TRIP MIGHT BE LIKE. PLACE ONE CHECK BESIDE EACH DESCRIPTION TO INDICATE WHETHER YOU STRONGLY AGREE, MILDLY AGREE, MILDLY DISAGREE, OR STRONGLY DISAGREE THAT EACH STATEMENT ACCURATELY DESCRIBES THE TRIP THAT YOU TOOK:

	Strongly agree	Mildly agree	Mildly disagree	Strongly disagree
The trip was a personal emotional experience.	( )	( )	( )	( )
The trip was a social experience.	( )	( )	( )	( )
The trip was a strenuous physical experience.	( )	( )	( )	( )
The trip was an exciting, adventurous experience.	( )	( )	( )	( )
The trip was an experience of aesthetic appreciation.	( )	( )	( )	( )
The trip was a personal religious experience	( )	( )	( )	( )

18. DIFFERENT PARTIES OF CANOEISTS ORGANIZE AND CONDUCT TRIPS IN VARIOUS WAYS. BELOW ARE PAIRS OF WORDS OR PHRASES THAT DESCRIBE DIFFERENT ASPECTS OF TRIPS. PLACE ONE CHECK FOR EACH STATEMENT TO DESCRIBE WHAT YOU PREFER TRIPS TO BE LIKE:

FOR EXAMPLE, IF YOU HAVE A STRONG PREFERENCE FOR ONE DESCRIPTION, PLACE YOUR CHECK IN THE SPACE CLOSEST TO THE APPROPRIATE WORD OR PHRASE:

I prefer that long canoe trips be
disciplined ☑ ○ ○ ○ casual

IF YOU HAVE A SLIGHT PREFERENCE FOR ONE DESCRIPTION, PLACE YOUR CHECK IN THE SECOND CLOSEST SPACE TO THE APPROPRIATE WORD OR PHRASE:

I prefer that long canoe trips be
disciplined ○ ○ ☑ ○ casual

I prefer that long canoe trips have
group decision-making ○ ○ ○ ○ a leader to make final decisions

I prefer that living arrangements on a long canoe trip be
comfortable ○ ○ ○ ○ spartan

I prefer the pace at which long canoe trips are conducted to be
gruelling ○ ○ ○ ○ relaxed

When on long canoe trips, I prefer to
keep moving when conditions permit ○ ○ ○ ○ stop and do other things when I feel like it

I prefer the responsibilities of group members to be organized
formally ○ ○ ○ ○ informally

I prefer that activities other than canoeing have
considerable time devoted to them ○ ○ ○ ○ little time devoted to them

I prefer that a long canoe trip be organized in
a consistent manner ○ ○ ○ ○ a flexible manner

SECTION 4: REMEMBERING THE TRIP

THIS SECTION DEALS WITH YOUR EXPERIENCES AFTER A TRIP IS OVER, WHILE YOU ARE REMEMBERING IT.

19. DESCRIBE BRIEFLY YOUR EMOTIONS AT THE MOMENT YOU REACHED YOUR DESTINATION AT THE END OF THE CANOE TRIP:

____

____

20. PLEASE LIST UP TO THREE BENEFITS YOU RECEIVED FROM DOING YOUR LONG WILDERNESS CANOE TRIP:

1. ____________________________________
2. ____________________________________
3. ____________________________________

21. CAN YOU RECEIVE THESE BENEFITS WITH THE SAME IMPACT BY DOING SOME ACTIVITY OTHER THAN A LONG WILDERNESS CANOE TRIP? IF "YES", LIST THE ACTIVITIES WHICH PROVIDE THESE SAME BENEFITS:

1. ( ) No
   ( ) Yes ________________________________
2. ( ) No
   ( ) Yes ________________________________
3. ( ) No
   ( ) Yes ________________________________

22. SOMETIMES, CANOEISTS KEEP WRITTEN RECORDS OF THEIR TRIPS. HAVE YOU DONE THIS?

( ) No → PROCEED TO QUESTION 23.
( ) Yes → CONTINUE WITH QUESTION 22a.

22a. PLACE A CHECK BESIDE ONE STATEMENT BELOW WHICH BEST DESCRIBES THE MOST IMPORTANT REASON AT THE TIME THAT YOU KEPT A WRITTEN TRIP RECORD:

I kept a written trip record ...

( ) to record my private thoughts at the time

( ) to give me a creative outlet

( ) to help me remember the trip in detail

( ) to tell others what the trip was like

( ) to provide a log for others who might go on the same trip

( ) for another reason (PLEASE SPECIFY)

____

23. PLACE A CHECK IN ONE SPACE BESIDE THE WORD OR PHRASE BELOW WHICH BEST COMPLETES EACH SENTENCE:

I think about the trip that I took ( ) very infrequently
( ) from time to time
( ) often

My memories of the trip are ( ) mainly pleasant
( ) both pleasant and unpleasant
( ) mainly unpleasant

SECTION 5: MOTIVATIONS

IN THIS PART OT THE QUESTIONNAIRE, THE FOCUS IS ON WHY YOU LIKE TO GO ON LONG WILDERNESS CANOE TRIPS.

24. PEOPLE TAKE LONG WILDERNESS CANOE TRIPS FOR MANY DIFFERENT REASONS. PLACE A CHECK BESIDE ANY OF THE STATEMENTS BELOW WHICH DESCRIBE THE MOST IMPORTANT REASONS WHY YOU LIKE TO TAKE LONG CANOE TRIPS IN THE WILDERNESS:

I like to take long wilderness canoe trips ...

( ) 1. to see the ecology of different areas
( ) 2. to socialize with my good friends
( ) 3. to use wilderness living skills
( ) 4. to commemorate an historical event
( ) 5. to escape the routines of everyday life
( ) 6. to see scenery that most other people can't see
( ) 7. to achieve something worthwhile
( ) 8. to experience the out-of-doors intensely
( ) 9. to belong to a group of competent, fit wilderness adventurers
( ) 10. to be the first to do a particular trip
( ) 11. for love of adventure
( ) 12. for good fishing
( ) 13. for the historical interest
( ) 14. to see beautiful scenery
( ) 15. to experience dangerous situations that I can handle
( ) 16. to experience discomfort
( ) 17. to face the unknown
( ) 18. to prove to myself and others that I can do it
( ) 19. for the challenge of white water
( ) 20. to escape the demands made on me by other people
( ) 21. to meet the challenge of physical endurance
( ) 22. to see wildlife
( ) 23. for another reason (PLEASE SPECIFY)

____

25. RANK YOUR FIVE MOST IMPORTANT MOTIVATIONS BELOW BY FILLING IN THEIR NUMBERS FROM THE LIST ABOVE:

# _____ most important	# _____ fourth most important
# _____ second most important	# _____ fifth most important
# _____ third most important	

26. I WOULD LIKE TO KNOW HOW YOU FELT ABOUT COMPLETING THE PREVIOUS QUESTIONS CONCERNING YOUR MOTIVATIONS. PLACE A CHECK BESIDE THE ONE APPROPRIATE WORD OR PHRASE TO COMPLETE EACH SENTENCE BELOW.

Question 24 about my motivations was ( ) easy
( ) neither easy nor difficult
( ) difficult

My motivations seem to be ( ) simple
( ) neither simple nor complex
( ) complex

In the past, I have thought about my motivations for wilderness canoe tripping ( ) not at all
( ) from time to time
( ) frequently

When I plan a trip, my motivations are ( ) in my subconcious
( ) occasionally on my mind
( ) uppermost in my mind

When I'm on a trip, my motivations are ( ) in my subconcious
( ) occasionally on my mind
( ) uppermost in my mind

My motivations seem to be ( ) unrelated to each other.
( ) somewhat related
( ) strongly related

Question 24 about my motivations was ( ) irrelevant
( ) somewhat relevant
( ) very relevant
to my experience of taking long wilderness canoe trips.

27. FOLLOWING ARE SOME STATEMENTS DESCRIBING DIFFERENT FEATURES OF A LONG WILDERNESS CANOE TRIP. PLACE A CHECK BESIDE ANY OF THE STATEMENTS WHICH DESCRIBE FEATURES OF A CANOE TRIP WHICH ARE MOST APPEALING TO YOU BECAUSE THEY CONTRAST WITH YOUR EVERYDAY LIFE:

( ) 1. Decisions have immediate consequences
( ) 2. A worthwhile objective is set and achieved
( ) 3. Comforts to which I am accustomed are lacking
( ) 4. A sense of timelessness develops
( ) 5. Decisions are compelling
( ) 6. The canoe party is responsible only for itself
( ) 7. The canoe party is independent
( ) 8. Life is simple
( ) 9. It is uncommon to see other people
( ) 10. Physical activity becomes a way of life
( ) 11. There is no sense of urgency
( ) 12. I can be with my friends on a continual basis
( ) 13. I feel as if I'm a part of beauty
( ) 14. Consequences of decisions are important only in the short term
( ) 15. Our activities become attuned to the land and the weather
( ) 16. Another feature which contrasts (PLEASE SPECIFY)

____

28. RANK YOUR FOUR MOST APPEALING FEATURES OF LONG CANOE TRIPS WHICH CONTRAST WITH YOUR DAILY LIFE BY FILLING IN THEIR NUMBERS FROM THE LIST ABOVE:

_____ most important

_____ second most important

_____ third most important

_____ fourth most important

SECTION 6: PROFILE INFORMATION

THIS SECTION ASKS FOR INFORMATION WHICH WILL ENABLE ME TO COMPARE SOME CHARACTERISTICS OF WILDERNESS CANOEISTS WITH THOSE OF OTHER RECREATIONAL GROUPS WHICH HAVE BEEN STUDIED.

29. WHAT IS YOUR SEX? ( ) Male ( ) Female

30. HOW OLD ARE YOU?

( ) 14 or younger
( ) 15 - 19
( ) 20 - 24
( ) 25 - 34
( ) 35 - 44
( ) 45 - 54
( ) 55 - 64
( ) 65 or older

31. WERE YOU MARRIED OR OTHERWISE "ATTACHED" AT THE TIME OF YOUR CHOSEN CANOE TRIP?

( ) No → PROCEED TO QUESTION 32.
( ) Yes ↓ CONTINUE WITH QUESTION 31a.

31a. DID YOUR SPOUSE ACCOMPANY YOU ON THAT TRIP? ( ) No ( ) Yes

32. DID YOU HAVE ANY DEPENDENT CHILDREN AT THE TIME OF YOUR CHOSEN LONG CANOE TRIP?

( ) No → PROCEED TO QUESTION 33.
( ) Yes ↓ CONTINUE WITH QUESTION 32a.

32a. DID YOUR CHILD(REN) ACCOMPANY YOU ON THAT TRIP?
( ) No ( ) Yes

33. WHAT LEVELS OF EDUCATION HAVE YOU COMPLETED?

( ) elementary school
( ) high school
( ) technical school
( ) university undergraduate degree
( ) university postgraduate degree
( ) licensed tradesperson

34. WHAT KIND OF WORK DO YOU DO?

____

35. WHAT WAS THE COMBINED INCOME OF YOUR HOUSEHOLD AT THE TIME OF YOUR CHOSEN TRIP?

( ) less than $10,000
( ) $10,000 - 14,999
( ) $15,000 - 19,999
( ) $20,000 - 24,999
( ) $25,000 - 29,999
( ) $30,000 - 39,999
( ) $40,000 - 49,999
( ) $50,000 or more

36. WAS YOUR TRIP A FINANCIAL HARDSHIP FOR YOU? ( ) No ( ) Yes

37. IN WHAT SETTING DID YOU SPEND MOST OF YOUR CHILDHOOD?

( ) isolated settlement
( ) rural
( ) small town
( ) suburban
( ) urban

38. ARE YOU AN ACTIVELY PARTICIPATING MEMBER OF AN OUTDOOR CLUB?

( ) No ——→ OMIT QUESTION 38a.
( ) Yes ↓ CONTINUE WITH QUESTION 38a.

38a. PLACE A CHECK BESIDE ONE STATEMENT WHICH BEST DESCRIBES THE MAIN FUNCTION OF THE CLUB IN WHICH YOU'RE MOST INVOLVED:

The main function of the outdoor club in which I am most actively involved is to promote ...

( ) activities (such as canoeing, climbing, etc.)
( ) the preservation and appreciation of wilderness
( ) both activities and the preservation of wilderness

THIS IS THE END OF THE QUESTIONNAIRE, UNLESS YOU WISH TO COMPLETE THE OPTIONAL SECTION WHICH FOLLOWS. THANK YOU VERY MUCH FOR YOUR TIME AND YOUR THOUGHTS.

PLEASE RETURN THE QUESTIONNAIRE IN THE STAMPED, ADDRESSED ENVELOPE PROVIDED. REMEMBER TO WRITE ME A NOTE SEPARATELY TO REQUEST A RESUME OF THE COMPLETED STUDY.

SECTION 7: OPTIONAL QUESTIONS

THE THREE QUESTIONS IN THIS SECTION EXPLORE AREAS IN WHICH I AM VERY INTERESTED, BUT WHICH ARE NOT CRUCIAL TO MY STUDY. I WOULD BE VERY APPRECIATIVE OF YOUR ANSWERS TO THE QUESTIONS IF YOU ARE ABLE TO COMPLETE THEM.

1. How did it come about that you went on your first long wilderness canoe trip?

2. The fifteen canoeists interviewed indicated that they received different satisfactions from a long wilderness canoe trip than they did from shorter (weekend) wilderness canoe trips. Have these satisfactions differed for you? If so, how?

3. Looking at a canoe trip from the point of view of three stages (planning, on-site experience, and remembering) is useful to me for my study. Is that a way in which you might study canoe tripping? If not, how would you study it?

APPENDIX 8

PRODUCTION OF THE QUESTIONNAIRE BOOKLETS

The paper used for the booklet was blue 18-pound mimeo paper. Blue permits less show-through from one side of the page to the other than does white or other colors in the same weight of paper; therefore, a light-weight paper can be used for cheaper mailing. The covering letter was printed on white paper.

In order to prepare the copy for reduction, typing was done with pika type and a carbon ribbon on 8 1/2" x 11" paper. Reduction allowed two pages to be lithographed on each side of one 8 1/2" x 14" sheet. Five such sheets, printed back-to-back, were then collated and saddle-stitched into a twenty-page booklet. In Babbie's (1973) opinion, this method of printing a long questionnaire has the most professional appearance. The covering letter also was reduced to 7" x 8 1/2".

APPENDIX 9

THE FOLLOW-UP LETTER

DEPARTMENT OF GEOGRAPHY
TELEPHONE (403) 432-3274

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA T6G 2H4

March 31, 1978

Dear

Approximately three weeks ago, you were sent a questionnaire that is part of a study about motivations for taking long wilderness canoe trips.

I am mailing this letter to all those who did not request résumés of the completed study, or who did not sign their names to the returned questionnaires.

If you have already filled out and returned your copy of the questionnaire, I would like to thank you very much.

If you have not been able to complete it as yet, I would be very grateful if you could fill it out and mail it back at your earliest convenience. While some questionnaires have already been returned, the success of my study depends on help from everyone.

Thanks again for your participation.

Sincerely,
Leslie Kroening
Leslie Kroening

APPENDIX 10

SCALE OF REMOTENESS FOR RIVERS AND LAKES

1. Barrens

Anderson
Back
Baillie
Burnside
Coppermine
Dubawnt
Ellice
Hanbury
Hood
Hornaday
Horton
Kazan
Kognak
Lockhart
Noatak
Thelon
Thlewiaza

2. Remote Northern Forest

Camsell
Caniapiskau
Cochrane
George
Moisie
Natla-Keele
Seal
Snare
Taltson
Winisk
Yellowknife

South Nahanni before 1974*

3. Semi-Remote Northern Forest

Albany
Attawapiskat
Beaulieu
Berens
Bloodvein
Drowning
Eastmain
Harricanaw
Hayes
Kenogami
Missinaibi
Ogoki
Pelly
Rat-Bell
Rivière du Chef
Rupert
Stewart

South Nahanni since 1973 from above Broken Skull River*

4. Well-Used Locations

Abitibi
Algonquin Park
Athabasca
BWCA
Bowron Lakes
Chapleau
Churchill
Coulonge
Dumoine
French
Gatineau
Groundhog
Mackenzie
Mattagami
Montreal
Ottawa
Peace
Quetico Park
Sables
Spanish
Wanapitei
Yukon

South Nahanni since 1973 from Broken Skull River and below*

---

* Warden service began on a regular basis in 1974 in conjunction with the creation of Nahanni National Park. Broken Skull River is a popular access point for the South Nahanni River, and is only one easy day's travel above the upstream boundary of the park and a staffed warden station.

APPENDIX 11

THE USE AND MEANING OF THE CHI-SQUARE STATISTIC

The chi-square statistic is a test of statistical significance. Tests of significance help researchers to determine whether observed associations between two variables have occurred because the variables are associated in a systematic way, or because of chance. A "significant" association is one which is not likely to have occurred by chance; that is, the variables are very likely to be associated with one another in a systematic way.

Chi-square uses row and column totals to compute the frequencies which would occur in the cells of any two variable table if the two variables were not associated with one another. These frequencies are then compared to the actual observed frequencies. The larger the differences between expected and observed frequencies, the greater value chi-square assumes. The next step is to determine the probability of obtaining a value for chi-square as large or larger, if the variables were not associated. This is done by plotting chi-square against an additional value, the "degrees of freedom", which depends on the number of rows and columns in the table. This probability is the "significance level" or "p". A significance level of .05 ($p=.05$) means that there there is a 5.0% probability of the observed association having occurred by chance. In other words, one is 95.0% confident that the association is systematic. A significance level of .05 is quite acceptable for the type of information analyzed in this study.

APPENDIX 12

RECOMMENDED CHANGES FOR THE QUESTIONNAIRE

The changes to the questions in the questionnaire which are recommended below are based on comments which respondents wrote beside various questions, on the results of the analysis, and on reflection about the questionnaire in general. The reasons for all of these changes have been discussed at various places in Chapters Four to Six.

Question 6 (page 3): Change "DOES THE ORDER IN WHICH YOU'VE DONE YOUR TRIPS HAVE A SPECIAL SEQUENCE TO IT? to "DOES THE ORDER IN WHICH YOU'VE DONE YOUR TRIPS HAVE ANY PARTICULAR SEQUENCE (OTHER THAN CHRONOLOGICAL) TO IT?"

Question 12 (page 6): Change "Planning is a necessary bother" to "Planning is a bother".

Question 14 (page 7): Change "The canoe is one of the best ways to get from A to B in the North American wilderness" to "Travelling by canoe is a tough and challenging way to get from A to B in the North American wilderness".

Question 15 (page 8): Omit "remoteness from emergency help".

Question 17 (page 10): Change "The trip was a personal religious experience" to "The trip was a personal spiritual experience".

Add "The trip was an educational experience".

Add "The trip was a dangerous experience".

Question 24 (page 14): Change "1. to see the ecology of different areas" to "2. to see new and different areas".

Change "2. to socialize with my good friends" to "2. to share the experience with my good friends".

Question 27 (page 16): Change "PLACE A CHECK BESIDE ANY OF THE STATEMENTS WHICH DESCRIBE FEATURES OF A CANOE TRIP WHICH ARE MOST APPEALING TO YOU BECAUSE THEY CONTRAST WITH YOUR EVERYDAY LIFE:" to "PLACE A CHECK BESIDE ANY OF THE STATEMENTS WHICH DESCRIBE FEATURES OF A CANOE TRIP WHICH ARE MOST APPEALING TO YOU:"

Question 30 (page 17): Change "HOW OLD ARE YOU?" to "HOW OLD WERE YOU AT THE TIME OF YOUR RECALLED TRIP?"

Omit age categories. Leave a blank for respondents to record raw age.